

KANSAS FARMER

ESTABLISHED 1863.
VOL. XXVII, No. 46.

TOPEKA, KANSAS, WEDNESDAY, NOVEMBER 13, 1889.

SIXTEEN PAGES.
\$1.00 A YEAR.

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Agricultural Matters.

THE HANDMAID OF AGRICULTURE.

Mr. Secretary Rusk's first report is out. He proposes active work in his department, outlining many new features. We quote a few paragraphs:

The immediate wants of the department then, are, first, appropriations which must be made to meet the obligations of the Department to the country, which I deem urgent; and, second, a laboratory to be erected on the department grounds, suitable for the purposes of important investigations which cannot now be undertaken. This building should be ready for occupancy at the earliest practicable day.

Pending this necessary legislation, I propose to complete plans, already formulated, for a reorganization of this department, and a portion of which has been anticipated in my estimates for the coming fiscal year. These estimates show a considerable increase over those of last year. Deducting from the \$630,000 appropriated directly to the experiment stations of the country, and there is left for the department's needs \$1,359,000, an amount which should not be measured by what is in the past, but rather by what a great agricultural country should pay at this time toward sustaining, protecting and promoting a calling which lies at the foundation of its prosperity and power.

In other civilized countries, and especially in the newer countries of the world, among whom we are finding our most vigorous competitors, work analogous to that covered by this department is prosecuted with a liberality and energy which, while it commands our respect, should not fail to serve as a warning that we ourselves must do our full duty in this matter if we expect to maintain our proud pre-eminence as the leading agricultural country of the world. Our sister republics in Central and Southern America and the empire of Brazil have with a few exceptions been devoting their best efforts, aided by liberal appropriations, to the application of science to agriculture, and this with marked success. To the north of us Canada, which has for

years possessed a department of agriculture, has been working with creditable zeal on the same lines, and the same may be said of all the British colonies.

Turning our attention to the older countries of the world, we find a British department of agriculture recently established, with a million and a half dollars annual appropriation at its command, while the same power combines Anglo-Saxon energy with the paternal government of the Latin races in its efforts to develop in India and in Egypt agricultural products commensurate to their teeming population and soil fertility. Germany annually expends \$2,850,000 for the same purposes. Brazil appropriated in 1885-86 more than twenty

tariff laws can afford, and to the fullest extent compatible with the equal rights of all classes, which is a fundamental principle of republican institutions, the farming industry justly claims its inalienable right. In the diversification of agriculture, which, I am thankful to say, has taken place during the past few years, and which I hope it will be in my power to greatly encourage, the farmer has been enabled to produce many articles comparatively unknown as a home product twenty years ago. For all such articles as our own soil can produce the farmer justly asks that protection which will insure to him all the benefits of our home market.

Great as are our crops in the aggregate,

Correspondence.

BORROWED MONEY IN KANSAS.

EDITOR KANSAS FARMER:—I have been interested, amused and edified by reading the recent financial articles in your paper by the good Brothers Bowman and Seabrook and your own worthy comments. Without a doubt the questions of money, loans, interest and usury are important ones with Kansas farmers, as well as those of other States. Your own comments, editorially, seem to raise the question whether or not it would be best were no money loaned in our State.

My observation almost convinces me that the present successful condition of Kansas is attributable to the fact that Eastern capital could



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millions of dollars for her agriculture commerce and public works. Russia more than fourteen millions for agriculture and mines for the same period. France appropriated in 1886 more than eight million dollars for her agriculture alone, and Austria more than four millions during the same year.

It is my desire to organize the department upon even a broader plane than these and other countries have established. To do so will require time and patience and that share of encouragement and support which I trust Congress will give to the department and to the efforts of its officers.

Throughout the country from time to time, and at all times in some parts of this great country, we find agriculture suffering from depression, to diagnose the cause of which is often a difficult task for our publicists and political economists, while our law-makers, both State and national, find their most difficult task in the delicate duty of so adjusting the respective rights of every class of our citizens as to secure to each the full benefits of their industry. This is neither the time nor place to analyze causes of agricultural depression nor to discuss at length the many panaceas proposed for its relief, but I do feel that the agencies which already exist primarily for the benefit of the industrial classes must be extended to the full for the advantage of the tiller of the soil.

Protection of American industries is one of the rock-rooted principles of the great party which this administration represents. To all the protection that wise

it must be admitted that our broad acres are not as prolific as they should be, and I am convinced that with the aid which can be afforded to agriculture by carrying out to the full the purposes for which this department exists, and thanks to the rapid growth of intelligence and the remarkable efforts at self-help among our farmers, the yield of every tillable acre in this country can be increased 50 per cent. More than this will science, properly directed, enable us to accomplish, for millions of acres at present unproductive can, by its application, be rendered fertile. The great nations of Europe strain every effort to make science the handmaid of war; let it be the great American people to make science the handmaid of agriculture.

Notes.

Drunkenness turns a man out of himself and leaves a beast in his place.

He that can read and meditate need not think the evenings long or life tedious.

Stewart recommends nicely-cured clover hay as an excellent feed for hogs in winter.

It is claimed that the prices of wool in Australia are higher than; Texas wool in Texas.

Happiness generally depends more on the opinion we have of things than on the things themselves.

All human experience goes to confirm the wisdom of Solomon, who said: "Who hath woe? Who hath sorrow? Who hath contentions? Who hath wounds without cause? They that tarry long at the wine,"

be borrowed and invested within our borders. Has our State been blessed with immigration of millionaires or capitalists, or was it settled by wealthy folks? The negative is the very plain answer to these questions. Has it received its population mostly from the "bone and sinew," "brawn and brain," intelligence and culture of the over-stocked East? The answer is yes. Those who came had bone, sinew, brawn, brains, intelligence and culture, but those who remained in the East had the dollars. These things they did bring, together with the magnificent soil of our beautiful State, suggest great possibilities; but like the excellent ingredients of good bread, with yeast omitted, or like the prudent Martha mentioned in the gospel—one thing was lacking—the dollars were conspicuous by their absence, they were needed to leaven the whole lump. Intelligence, of which a vast quantity has always been kept on hand by our fellow citizens, contrived means to transfer the dollars of the East to the fertile soil of the West. The magnificent public buildings of every county seat, the beautiful churches of our hundred cities, the substantial business blocks in our small, as well as larger towns, the tens of thousands of beautiful farm homes in every township, speak with loud tongues of the success of this operation. Go where you will, in every town and city of the State, and the eye will scarcely rest on a building that was not originally erected with a mortgage, by money furnished by an Eastern "Shylock;" the very existence of the structures was owing to the fact that there was money in the East that could be borrowed to leaven the lump of brawn, brain and culture. The many thousands of elegant homes and business blocks that were built by this means, but are now clear of debt, manifest the benefits of the possibility of borrowing. Every dollar that is entrusted to Kansas

[Continued on page 4.]

The Stock Interest.

THE BEEF COMBINE LAID BARE.

The New York Press, one of the leading and most reliable papers in the East, recently laid open the beef combine. We make a few extracts, as we find them arranged in the Iowa *Homestead*. The Press shows how the thing is working at that end of the line as well as at this. We quote:

It is a startling statement to make, and yet it is one which facts and figures and environment lead up to as a logical conclusion, that a beef famine stares this country in the face. With present causes and conditions remaining in unchecked operation, it will not be more than two years before the price of beef will be forced up, and the rise will continue until, for the poor man, beef will have been transferred from the list of necessities to that of luxuries, and pork, and mutton, too, for that matter, will follow in its wake, although at an interval.

A serious, if not dangerous condition of affairs is pending in the beef market. It is not necessary to enter into diatribe or denunciation in treating of the subject, for a presentation of the mere facts, together with an analysis of the situation, is enough to set any person to thinking seriously of the situation and of the possibility of averting the natural sequence of the operation of the present elements entering into the question.

The main natural factors at work on the question of the beef supply are three. These are, first, the source of the supply, which in essential measure is the great cattle ranges of the West; second, the area of land adapted for the ranges, excluding the question of artificial feeding and housing of cattle; third, the increase of population of the country.

But above and beyond and permeating those natural factors in the laws of trade and of supply and demand there is an artificial factor entering which controls the whole question, and if allowed to continue its operations in the future as it has in the past, and is doing at present, without check in the form of competition, will soon reach its legitimate climax in the ruin of the range cattle business, an exorbitant enhancement of prices of beef, and ultimately an absolute beef famine. This factor is the "Big Four" monopoly of Chicago.

The value of cattle has been forced down by the great combination which now practically controls the meat supply of 65,000,000 of people, from an average for the whole country of \$33.53 per head in 1884 to \$17.05 in 1889. This loss the cattle-growers of the country have been obliged to stand. But have the people benefited? That is the question. The Press is obliged to answer in the negative, for the price of beef has remained stationary. The money has gone into the pockets of the "Big Four," who now control the principal avenues—Chicago, St. Louis, Omaha and Kansas City—through which this meat supply is forced to flow in order to reach the Eastern markets.

The prime factor in this widespread disaster to the cattlemen is the restricted market, not which they have voluntarily selected, but which they have been forced into by a combination of circumstances beyond their control. It is significant that while the price of cattle has thus been going down the price of beef to the consumer has remained essentially stationary in these years, and how and why this is so is an interesting question in political economy.

It is well known that a diamond in a desert has no value. It becomes valuable only when it has a market. And if there were only one person to buy it—in other words, if the market were as restricted as possible—the jewel would go for a song. And so with the cattle

products of the Western ranges. They have had now for five years virtually only one market, with no competitor in it. That market is the "Big Four" at Chicago, with ramifications at St. Louis, Kansas City and Omaha. Everybody is familiar with their operations, yet a cursory review of these may not be out of place in order to bring into clear light the significance of the data which are to be used.

As long as the cattlemen could pour their cattle into an untrammelled market, where competition gave life to trade, they made a profit which filled their own coffers, while at the same time they supplied the market with the very article which was in demand. The Messrs. Armour, Swift, Morris and Hammond, who constitute the "Big Four," saw a magnificent opportunity for themselves, and, like the leaders, whether in war or finance or diplomacy, they proceeded to avail themselves of it. They raised the necessary capital for plants. They made themselves practically the exclusive buyers of cattle from the ranges. It was a simple business arrangement, requiring foresight, prudence, brains, pluck, astuteness and perseverance.

They became controllers in interest of the ownership of the stock yards, whither the cattle were taken pending sale. With their enormous capital they drove out one competitor after another, until they controlled the situation. One great secret of their power was that which was so potent with the Standard Oil trust—their ability to get secret rebates from the railroads, so that they could put their dressed beef on the market at lower rates than their competitors could. They were also their own butchers, and then they became their own canners. If competitors or the cattlemen themselves opened new stock yards, they were still in the hands of the "Big Four," for the producers were still obliged to sell to the Armours, or the Swift, or Morris, or Hammond—for while "Nels" Morris pretended to be a free lance he never cut in on the other three in prices. He well knew that he could make more by "standing in" with them so far as prices were concerned. If cattlemen sought to sell to others than to the "Big Four" they found themselves balked, for whoever made purchases at higher rates than the "Big Four" found himself undersold when he came to dispose of cattle transformed into dressed beef. The "Big Four" opened their own meat shops all over the country, and this land from the Atlantic to the Pacific is strewn with the wrecks of small butchers who have dared enter as factors into competition with the great quartette. And still the nefarious work goes bravely on.

To understand clearly how absolutely the "big combine" has the cattlemen at its mercy, it must be borne in mind that ranchmen and farmers must send their cattle to established markets. No matter which one of the four markets before mentioned be selected, the cattlemen find, practically, only the same set of buyers, the "Big Four." These men are represented in each market, not individually, to bid against each other, but collectively, as a unit, one man, as a rule, buying for the four. The cattle purchased are divided up among them. An interesting feature of these purchases of the "Big Four" is that the prices to be paid for the various classes of cattle on any given day are fixed by the "combine" beforehand, sometimes on the morning of the day of purchase, but oftener days and even weeks ahead, within narrow limits of a small fraction of a cent per pound.

It will readily be seen that the cattlemen have thus been placed absolutely in the hands of the "Big Four." This fact is well known. It is with the consequences as one of the great factors in the beef supply problem that this article has to do. It is clear that with the ability thus

purely a question of policy with the quartette what prices they should pay. They were too shrewd to kill at once the goose that laid for them the golden egg—that is, the ranchman; but they adopted the slow but no less sure process of strangulation. The profits, of course, lay between the buying price of cattle and the selling price of dressed beef. The "Big Four" were determined on one thing, and that was to absorb as much as the above indicated policy would permit of the profits of the cattlemen; and so, controlling the market, they began to pay less and less, until within some four years they have forced the price of cattle down more than 50 per cent.

As the price of beef to the consumer has meanwhile remained nearly the same as before the monopoly took control of the market, it will be seen that an enormous profit has been secured by the "Big Four." For the first three years the profits largely went into the plant and into the development of it. The profits on each head of cattle are from \$12 to \$15, according to the careful computation of experts, and as each one of the "Big Four" handles nearly half a million of cattle a year the annual profits of the quartette average about \$25,000,000.

Although the sales of cattle have been unusually large the past year, and are so in the present season, giving the appearance of an abundant supply of beef, this very fact, on analysis, proves to be the most dangerous manifestation possible of the approaching climax. This plethora of offering does not indicate any plethora of legitimate supply. This apparent abundance of cattle is due to the fact that the ranges are throwing their capital as well as their interest upon the market. In other words, they are selling the bulk of their herds in addition to their natural output—the female cattle and calves which, respectively, have hitherto been kept for breeding purposes and to develop into steers. In short, the cattlemen are closing out their business under the relentless thumbscrew of the "Big Four."

It is a significant fact that the number of cattle slaughtered annually in the United States during the past three years, plus the annual mortality, has exceeded the annual female cattle product for the same period, exclusive of calves consumed as veal; and though the ratio of such excess cannot be precisely obtained, yet available statistics leave no doubt as to the correctness of the conclusion. While the number of cattle in the United States has thus been diminishing, or, at best, has remained practically stationary, the population has increased rapidly, and the ratio of cattle to population has undergone a significant change.

In 1840, by the best data obtainable, the *per capita* of cattle exceeded that of population by about 50 per cent. At the beginning of the war, 1860, the numbers were substantially equal, while to-day the number of cattle is about two-thirds of the number of inhabitants, or only 66 per cent. of a beef animal to each head of population.

It cannot be controverted that with our ratio of increase of population, and with the decreasing acreage devoted to cattle-raising, this discrepancy must become annually wider, until our own people shall not only consume all the beef that the country can produce, but be compelled to import beef from Canada and South America.

Of perhaps equal importance is the fact that for several years past, in order to meet the annual beef demand, it has been found necessary to make large and yearly increasing drafts upon the female cattle of the country, to an extent previously unknown. Formerly, as a rule, only the matured steers and aged or barren cows were sent to market, the supply from these classes being equal to the demand, whereas from 1886 to 1888 inclusive the beef supply from these sources proved so inadequate that large drafts had to be made upon the breeding stock of the beef-growing regions, particularly west of the Mississippi.

Thus the official reports of the cattle handled at the Union stock yards, Chicago, for the year 1888 show that out of a grand total of 2,611,543 head of horned cattle handled in that period (exclusive of 96,000 calves) 870,514 head, or 33½ per cent. of the whole number, were cows. It is also worth considering that in consequence of this increasing demand for female cattle as beef, many thousands of young cows and heifers have been spayed in order to

increase their weight at maturity, thus withdrawing them from the class of breeding animals.

The production of beef, unlike that of cereals and other agricultural products or of manufactured articles, cannot be increased at will, nor hastened. Retarded and lessened it may be, and is being, by the operation of existing natural causes, some of which are above indicated. But to produce by any given date a mature (four-year-old) beef steer, one must begin nearly five years in advance, and must, on the average, raise two calves to get one steer.

Under the existing conditions in the United States it is not only demonstrable that within a very few years we shall have no surplus beef for export, but there is every reason to believe that our total beef supply will be found less and less adequate to our own needs, as measured by our present rate *per capita* of consumption.

Briefly stated, the status of the cattle-growing industry of the United States is that of a steadily diminishing supply to meet a steadily increasing demand.

At all events, unless there appear some saving economic providence in the shape of new and independent competition, the most discerning mind, studying present conditions and tendencies, cannot well discover how we are to avoid a beef famine in the near future. There is no need to deceive ourselves by the fictitious abundance of cattle in the market, for the situation is the same as to cattle and consumers as it was as to the duped investors in Grant & Ward contracts—they were getting what they thought were enormous returns on their investments, when, in fact, they were being paid out of their own principal. Two years more of the present "abundance" of cattle in the market will demonstrate to the uninitiated how young cows, calves and spayed heifers have been slaughtered to produce this seeming abundance; the cattle range industry will have been closed out, and the foundation laid for an unavoidable beef famine.

The Stalk Field Diseases.

The time of year is approaching when we may expect to hear of loss of cattle in stalk fields, and we may expect to see the same variety of causes of death assigned as of old. The writer of this had occasion a little less than one year ago to make some observations upon the conditions and circumstances under which loss of cattle occurred in Blue township, Pottawatomie county. He ventured to suggest, not the least dogmatically, that the cause of death, instead of being due to poor and indigestible feed and lack of water, might be the more acute one of indigestion caused by over-eating of grain. But it was observed that there was no great distension from gas that would almost necessarily have been an attendant. This would probably have been fatal to that view.

Anything that will give light upon the cause of death will be welcomed; for only by an understanding of the real cause can there be hope that prevention or cure will be possible.

Dr. F. S. Billings, of Nebraska, claims to have found a specific organism, or so-called germ, in animals that die of the "corn-stalk" disease. He thinks to have shown conclusively that this organism is the cause of this disease, and has given the characteristics of the disease at some length, with suggestions for prevention.

Prof. Burrill, of Illinois, has found a disease of corn which destroys or seriously injures the plants attacked. This disease appears variously distributed over a field. Single stalks or hills are sometimes affected. At other times, the corn over a considerable patch is destroyed. Occasionally, a whole field is attacked. These investigators have thought that the germs of this corn disease might be the active agent in the disease among cattle. As late as the middle of August last, Dr. Burrill had failed to develop the disease in animals by inoculations of his corn disease. He says that the identity of the organism discovered by him in corn

with that obtained by Dr. Billings from diseased animals remains to be proved. In speaking of these matters, I use the caution which is seemly in one of the laity. Perhaps I should not intrude within the charmed circle at all. But interest taken in the matter is the only excuse. Now, while this "germ theory" seems to be the most plausible explanation of the stalk field disease, it is difficult to see why it should be more prevalent among cattle that graze the stalks standing in the field than among those that eat corn as fodder or as ensilage, if the germ is one that develops in the corn stalks; unless perhaps its virulence is attained at the season of ripening of the corn so that fodder and ensilage corn would have been cut. I have never heard of the trouble except among stock running on stalk fields. With these, the disease is often swift and sure. It may be that the bacteria attack some other plants than the corn, and the eating of these plants may be the means by which the bacteria are introduced into the animal. This would seem to meet the objection raised to the stalks being the agent of infection. At any rate, we shall watch the developments in this line with great interest. If a means of preventing this loss to our live stock interests shall be the outcome of the work, the people of the Western States will owe a debt to bacteriologists which they will find it difficult to pay.—Prof. Failyer, in *Industrialist*.

In the Dairy.

Arithmetic in the Dairy--Leaky Cows.

Too many of our farmers neglect their arithmetic in the dairy business. Very few have any definite idea of the cost of a quart of milk, yet the matter of a fraction of a cent determines the profit or loss in the business. They will attend a cheese meeting in the spring and haggle for hours over the difference between a sixth and a seventh of a cent in the manufacture of a pound of cheese, but neglect entirely to consider the cost of a pound of milk. Every farmer should have some data by which he can tell how much a quart of milk costs him at different seasons of the year.

Each cow should be tested by herself, at least once a year, and twice would be much better. In this way the cows that make our profits could be separated from those that are a positive loss. It is not every cow that is a success. There are as many failures in the dairy herd as in the human family. Some people should have died before they were born, and some cows should have been oxen, or made into veal in calfhood. The question with the careless farmer is, which is which in his herd. He should be able to settle this question unerringly. Two cows were recently taken for experiment at the New Hampshire Experiment Station. The poorest and the best were selected with the object of finding the difference in the cost of producing a quart of milk. It was shown that the latter cost 1.59 cents, while the former cost 4.26 cents. The average cost from the whole herd was 2.74 cents. Now for some practical conclusions.

We will say that a quart of milk can be produced for 1 cent, from the best cow, and for 3 cents from the poorest. Cheese sold at 11 cents will pay 2 cents per quart for the milk used to produce it. The profit on the best cow is 100 per cent., on the poorest cow 50 per cent. Now anybody can readily understand that it will be economy to stop milking that poor cow immediately, as she reduces the profits to practically nothing. There is once in a while a cow in a dairy that leaks her milk, and she is condemned to the beef barrel; but there are many that leak profits continually and are kept from year to year. Let the leaky cows be fattened at once. Let farmers introduce a pair of scales and a slate into the milk-room and then go on a still hunt for the leaky cows. When they are found don't be so mean as to sell them to your neighbor for good milkers, but don't let them escape the butcher knife. War to the knife on the leaky cows, and knife to the hilt!—*Pennsylvania Farmer*.

John Boyd's "Starter."

A "starter," so-called, in preparing cream for the churn, is one of the latest innovations. The originator of it is Mr. John Boyd, of Elmhurst, Ill. It consists of pure creamed milk, free from fat, and as little exposed to the air as possible, which is heated to exactly 90°—neither more nor less—and enclosed in an air-tight, heat-and-cold-proof box, twenty-four hours, at the end of which time it is ready for use. From 1 to 2 per cent. of this is added to the cream by sifting it evenly over the surface through a colander, and then stirring it in thoroughly, as rennet is stirred into the milk in cheese-making. The cream must be at a temperature of exactly 70°, and must be kept at this temperature for twenty-four hours or so, when it is ready for the churn. It must be cooled to 65° or 63° for churning, according to the season and conditions. This process is claimed to secure a uniform flavor and an even product of butter, one churning being just like another, provided the cream has been handled the same before introducing the starter. The flavor is undeniably a lactic acid one, which probably can in no other way be so certainly and uniformly secured. But there still may continue some dispute whether this is the universal flavor which everybody will most relish. Many, in times past, have declared for sweet cream butter, and some still adhere to it. The controversy is not yet ended; but perhaps between John Boyd's starter, which turns out sour cream butter, and the new butter-extractor, which so far contemplates only sweet milk butter, the mooted question will be finally settled. We should not be surprised, however, if the jury should disagree. "There is no accounting for tastes." There is a creamy, delicious butter flavor, and there is a lactic acid flavor. Oleomargarine has had, so far, only the lactic acid flavor. The real butter flavor is beyond the reach of the oleomargarine manufacturer. His product does not compete with butter having the genuine butter flavor. In time, perhaps the consuming public will note the difference. If it prefers the acid flavor, the bogus butter makers may well rejoice, for their calling will be assured. Then perhaps we shall read of an oleomargarine trust.—*Milky Way*.

Exercise for Cows.

The question of exercise for cows is receiving some attention with that of soiling. It appears that for years Prof. Daniels, of the Western University, has kept a cow standing in the stable from November to May, without apparent detriment. The Hollanders put up their cows in the fall and they do not leave the stable until the grass comes. They do not appear to need much exercise beyond chewing the cud, standing around, getting up and lying down. But the Hollanders keep the stables scrupulously clean. Cows must have sweet, wholesome air, and it is believed by good judges that sunlight, or at least full daylight, is essential. A few hours in a clean yard is no drawback, to say the least.

If lactic acid imparts the true butter flavor that the public palate demands, why does not some enterprising chemist go into the manufacture of the acid and give it to us clear, without so much fuss to develop it in the cream? There are plenty of whey vats in the country from which to extract it.

Farm Record.

We have made arrangements with that well-known book-binding establishment, the Hall & O'Donald Lithographing Co., of Topeka, to supply us with a limited number of Farm Records, a blank book nicely ruled, printed and classified with the following contents: Directions and Explanations, Introductory, Diagram of Farm, Inventory of Live Stock, Inventory of Farm Implements, Inventory of Produce on Hand, Cash Received from all Sources, Cash Paid Out, Field Account, Live Stock Account, Produce Account, Hired Helper Month, Hired Helper Day, Household expense, Accounts with Neighbors, Dairy and Fowls, Fruit Account, Notes and Obligations Owning, Notes and Obligations Due You, Interest, Taxes, Insurance, Physician and Druggist Account, Miscellaneous Accounts, Improvement and Repairs, Weather Report, Recapitulated Annual Statement, Tables of Useful Information, etc., etc. This book contains 220 large pages 8x12½ inches in size and is sold regularly at \$2 and is well worth many times that price to any farmer who desires to keep run of his business. We will supply this "Farm Record" and the KANSAS FARMER one year for \$2, the book delivered by express or mail. Or we will send the Farm

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Spokane Falls New Line.

The Union Pacific Railway, having completed its line to Spokane Falls, Washington Territory, is running its trains direct to that point, thus forming the most desirable route from the East on account of its Pullman Palace sleeping cars, Pullman Dining cars, and Free Pullman Colonist Sleepers. Spokane Falls is situated in the Palouse country and is the distributing center for a section of the Northwest, the resources of which are unlimited. As an illustration: 50,000 bushels of wheat have been raised from 1,000 acres of land. Another feature of the country greatly conducive to the raising of crops, is the rainless harvests, no rain falling while crops are being harvested.

Many desirable farms may yet be had in this remarkably productive region on reasonable terms, and a more favorable opportunity for procuring a farm cheap will not soon present itself again. For pamphlets descriptive of the country, or for rates, time tables or maps pertaining to the Union Pacific Railway apply to your nearest Ticket Agent, any Agent of this company, or the undersigned.
B. L. LOMAX, Gen'l Pass. Agent.

The Northwest.

There is no part of the United States that affords for the pen of the descriptive writer such a field as the great Northwest, with its illimitable prairies, endless lakes and mountain scenery, said by experienced foreign travelers to be the finest in the world; its wonderful and beautiful twin cities, St. Paul and Minneapolis, situated on the Mississippi river, called rightly the "Father of Waters." The latter city is known far and wide as having within its borders the largest flouring mills in the world, and both of them being noted for their wonderful growth, financial soundness and credit. Two beautiful sites and a fit ending to a charming ride in luxurious vestibuled compartment trains over the Chicago, St. Paul & Kansas City railway. Money, experience and strict attention to business have in a short time made this line one of the leaders of the Northwest. A ride over this route, whether the traveler is on business interest or a seeker after pleasure, is long to be remembered. The greatest desires of the traveler are secured in the Chicago, St. Paul & Kansas City railway, viz: comfort, safety, and an arrival at destination on schedule time. The officials in the offices are men of experience in catering to the public, and consequently courteous to all. The employees of the road and in the trains are careful, polite and attentive to the wants of their patrons. Full information in regard to routes of the Chicago, St. Paul & Kansas City railway promptly furnished at all times upon application personally or by letter to W. R. BUSENBARK, General Passenger and Ticket Agent, Chicago, Ill.—*Illustrated World*, Sept. 14.

The Popular Line

To the East is the Burlington Route (Hannibal & St. Joseph R. R.). The service by this line has been constantly improved until it has reached a degree of excellence surpassed by none, and equaled by few. The Burlington's "Eli" is probably the finest and most popular train running between the Missouri River and Chicago, being a solid through Vestibule train of Pullman Sleepers and Free Chair Cars. Leaving Kansas City, Atchison and St. Joseph after supper, the passenger arrives in Chicago at 9:15 in the morning. Having taken breakfast on one of the Burlington's World-Renowned Dining Cars, he is ready for the day's business, or in ample time to make all Eastern connections.

For the convenience of passengers from Kansas City the "Eli" takes a Dining Car out of Kansas City on which East-bound passengers are served with a supper which is equaled by few hotels. The Burlington's St. Louis line, though comparatively new, is becoming better known and growing in popular favor every day, until it bids fair in the near future to be the favorite line between the Missouri River and St. Louis. This train, consisting of through Sleepers, Chair Cars and coaches, leaves Kansas City, Atchison and St. Joseph after supper and puts the passengers in St. Louis for breakfast, and ample time to make all connections.

You are also requested to bear in mind that the Burlington (Kansas City, St. Joseph & Council Bluffs R. R.) is the only line running through Pullman Buffet Sleepers between Kansas City and St. Joseph and St. Paul and Minneapolis. This is the short line between Kansas City, St. Joseph and Omaha. Through daily trains with Sleepers and Chair Cars. In whatever direction you travel be sure your tickets read over the Burlington Route, thereby insuring yourself the greatest amount of comfort, with the least expense of money and time. Write for information, circulars, etc., to H. C. ORR, Gen'l Southwestern Pass. Agent, 900 Main St., Kansas City, Mo.
A. C. DAWES,
Gen'l Pass. & Ticket Agent, St. Joseph, Mo.

TO MONTANA, OREGON AND WASHINGTON.

If you are going West, bear in mind the following facts: The Northern Pacific railroad owns and operates 987 miles, or 57 per cent. of the entire railroad mileage of Montana; spans the Territory with its main line from east to west; is the short line to Helena; the only Pullman and dining car line to Butte, and is the only line that reaches Miles City, Billings, Bozeman, Missoula, the Yellowstone National Park and, in fact, nine-tenths of the cities and points of interest in the Territory.

The Northern Pacific owns and operates 621 miles, or 52 1/2 miles, or 56 per cent. of the railroad mileage of Washington, its main line extending from the Idaho line via Spokane Falls, Cheney, Sprague, Yakima and Ellensburg, through the center of the Territory to Tacoma and Seattle, and from Tacoma to Portland. No other transcontinental through rail line reaches any portion of Washington Territory. Ten days stop over privileges are given on Northern Pacific second-class tickets at Spokane Falls and all points west, thus affording intending settlers an excellent opportunity to see the entire Territory without incurring the expense of paying local fares from point to point.

The Northern Pacific is the shortest route from St. Paul to Tacoma by 207 miles; to Seattle by 177 miles, and to Portland by 324 miles—time correspondingly shorter, varying from one to two days, according to destination. No other line from St. Paul or Minneapolis runs through passenger cars of any kind into Idaho, Oregon or Washington.

In addition to being the only rail line to Spokane Falls, Tacoma and Seattle, the Northern Pacific reaches all the principal points in northern Minnesota and Dakota, Montana, Idaho, Oregon and Washington. Bear in mind that the Northern Pacific and Shasta line is the famous scenic route to all points in California.

Send for illustrated pamphlets, maps and books giving you valuable information in reference to the country traversed by this great line from St. Paul, Minneapolis, Duluth and Ashland to Portland, Oregon, and Tacoma and Seattle, Washington Territory, and enclose stamps for the new 1889 Rand-McNally County Map of Washington Territory, printed in colors.

Address your nearest ticket agent, or CHAS. S. FEE, General Passenger and Ticket Agent, St. Paul, Minn.

The Elixir of Life.

Is agitating the public mind at the present time, but we would remind the public, especially those who contemplate a trip to Chicago, St. Paul, Minneapolis, or anywhere else in the east or north, to be sure and travel over the Chicago, St. Paul & Kansas City railway, celebrated for magnificent equipment, fast time and punctual service. Write for rates, time tables to any agent of the company, or to W. R. BUSENBARK, Gen'l Pass. Agent, Chicago.

An Exquisite Engraving.

A very costly and elegant steel plate engraving has just been executed in the highest style of the art, copies of which from a limited supply, are now ready for delivery, and will be sent to any part of the world on receipt of 25 cents each, in stamps or coin. The noble genius of an "Entrance" to the "Garden of the Gods" is the favorite theme of poet and painter. The outer parapets are of pure white, while the interior columns spring boldly from the plain to a height of 350 feet—the whole suggesting the ruins of a vast temple. These towering walls form a majestic framework for the snow-capped summit of Pike's Peak, which reveals itself among the clouds in the far distance. To secure an early copy of this admirable work of art, address JOHN SEBASTIAN, Gen'l Passenger and Ticket Agent, CHICAGO, ROCK ISLAND & PACIFIC RAILWAY, Topeka, Kas., enclosing the price, 25 cents.

Free Reclining Chair Cars Between Kansas City, Pueblo, Colorado Springs and Denver.

The "Santa Fe Route" is now running free reclining chair cars between Kansas City and Denver on daily trains Nos. 5 and 6, leaving Topeka at 2 p. m. and 3:20 p. m., respectively. These cars are entirely new, and have been built expressly for this train, are fitted with all the modern appliances for both convenience and safety, and are unequaled by any cars run between these points heretofore. No line can offer you better accommodations than the old reliable "Santa Fe Route."

For any information desired regarding rates, through car accommodations, time of arrival and departure of trains, etc., call on ROWLEY BROS., Agents, Sixth and Kansas avenues, W. C. GAUVEY, at the depot, Topeka, or any agent of the Santa Fe, or address
GEO. T. NICHOLSON,
G. P. & T. A., A. T. & S. F. R. R., Topeka, Kas.

Good sheep require good care to maintain their excellence, or they will soon deteriorate.

An exchange says that one of the most prominent characteristics of the Shropshires is their fecundity. This quality was developed by selection during the period of the development of the breed itself—only twins being used for breeding purposes.

To Breeders.

The breeders of improved stock in Kansas should send for a sample copy of *Western Resources*, published at Lincoln Neb. It is a representative live stock journal. For samples address the publisher, H. S. Reed, Lincoln, Neb.

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.

(Continued from page 1.)

brains by Eastern people is one dollar more invested in the present and future prosperity of our excellent commonwealth. Suppose these dollars go into a magnificent building whose owner lacks financial genius and a mortgage foreclosed causes the building to be sold. The fact of the investment and the building remain to the benefit of the State. Shylock cannot hitch to it and haul it back to Connecticut or the weary wilds of New Jersey. He buys it himself and he thereby becomes interested in the more in the prosperity of the State. But dollars, like coy maidens of great beauty and most desirable, are very shy; they can be coaxed and flattered, but they cannot be corralled, like Texas steers, with whoops and yells and the crack of the whip. Let them be faced by smiles and the show of actual prosperity and they will repose in your arms trustingly like the innocent maiden, with a 5 or 6 per cent. smile, who knows no harm can come to her; but face them with frowns and give them to understand that they can have only poor shelter, and that their safety here is doubtful, and the innocent maiden dollar will shrink back, while only the brazen, courtesan dollar will come forward, who will demand a big fee in advance. This is the dollar which spreads desolation and disease, and this is the dollar which Kansans must shun.

Not over 1,000 miles from your own beautiful KANSAS FARMER building is a magnificent structure admired by all who gaze upon it. It was built by the expenditure of many thousands of dollars, and the owners have a loan placed upon it which draws the small rate of 6 per cent. interest, and no commission was paid for the placing of the loan. Why? Because its owners were known to be men of solid worth, of financial integrity, and those who loaned the money knew their interest would be forthcoming when due and the principal paid when the stipulated time arrived. Let the character of Kansans generally be so shown to our Eastern brethren and we will not have need to talk about 12 per cent. interest, usury, extortion, Shylocks, etc. There are millions of dollars "back East" which have been made by hard toil of many generations, money that is now held by small farmers, widows, clergymen, maiden ladies, and many others who would gladly invest in Kansas if they can be certain their security will be ensured. In Eastern States the course of growth has been different from that exhibited by Kansas. There it required many generations to make substantial farms and busy towns, while here we find the very first generation enjoying these privileges.

The writer of this was born on a farm, was raised and educated on a farm, and now owns a farm in Kansas with a 6 per cent. mortgage upon it. So he feels he has a right to speak to farmers upon such an important subject as the money question and borrowing. Whether it is the blatant mouthings of the anti-prohibitionists, the angry howlings of a mob of labor strikers, or the well-meaning ideas expressed by the financial reformers—anything and everything that is said and done to impair the credit of our glorious State, works to the increasing of interest rates by the withdrawal of the innocent maiden dollar above referred to. Kansans must have money—of the kind that has a value, that is worth something to hold and costs something to get—real dollars. Without it they would have to delve for succeeding generations to place themselves on a substantial footing; with it they become young giants who spring from the earth at once armed and ready for the fray.

Topeka, Kas.

DE WITT CLINTON.

Beautiful! beautiful! let us all exclaim together. What loving, generous souls these money-changers are. Only treat them as superiors, give them all they ask and kiss them when they strike—then they will love you and come and sup with you and abide with you. In ancient story we are told of a bird of prey which, with a gentle winnowing of its wings, fanned its victim to sleep while with its beak it drained the submissive creature's blood. These men raise a false issue. If they would only quote us correctly or construe our words according to their meaning, they would be saved much annoyance and so would we. The KANSAS FARMER understands as well as Messrs. Clinton, Seabrook and Bowman, that Kansas farmers will need a good deal of borrowed money in the future, and it is for that reason that we want to get it for them as cheap as possible. They cannot pay out at existing rates of interest; they must have relief or thousands and thousands of them must lose their homes, there is no help for it. To require them to renew and go ahead is but to prolong the unequal struggle, it simply postpones the inevitable. Let us be honest about this matter; there is no better way to keep our security good. This cry about impairment of security is a subterfuge. Nobody is doing or trying to do anything of the kind. Kansas farms are first-class security for what they can afford to pay. And if they are good for 10 per cent. they would be better for 5. If prevailing rates are not too high, surely the security for that rate would not be impaired simply by owners asking for lower rates. And as to this idea of fawning and cringing before men who have money to lend and simply because they have it, while it is the practice and while it is doubtless pleasant as well as profitable to the men of money, it is repulsive to honest and honorable men, and repugnant to every principle of freedom. What

better is the owner of money than the owner of wheat or sugar or nails or lumber? We are not under special obligations to bow and scrape to the merchant who wishes to sell us coffee. What better is the person who wishes to sell us money? We all understand the reason of this required obsequiousness; it is because the money power rules the world; it has the people bound hand and foot to-day. Every day's market report begins with "The Money Market," showing how much interest rates have fallen or risen in the last twenty-four hours. While we understand very well the average benefits of borrowing on long time loans secured by farm mortgages, we have no hesitancy in expressing our belief that Kansas has been injured more than benefited by excessive borrowing, and strange as it may seem, these modest, shy, conservative widows and orphans and maiden ladies and other persons who lend money merely for accommodation to needy farmers, are responsible for it. Land offices in the early days were literally corralled by loan agents. Their signs were above every business office, and they took hold of every poor fellow who came to enter his land. Money was actually forced on unwilling borrowers. The old Kansan who does not know about this, came through with his eyes shut. Money was lent to pay the entry price, attorney fees, clerk fees, office fees, and a note and mortgage taken for the amount lent with 50 per cent. added, payable in a year and sooner on default of payment of any specified detail. Men were talked into borrowing money to buy cattle with to "stock up" their farms, and 50 per cent. added in the note, when the law allowed only 12 per cent. And look at the situation to-day. Go into any Kansas town of considerable size and count the signs which advertise "Money to Loan." They are everywhere—these modest, retiring, accommodating people who shy at the rustle of a leaf. If gentlemen will listen a moment we will try once more to make the position of the KANSAS FARMER, as to this matter, perfectly plain: First, we regard Kansas farms as perfectly good security for any reasonable rate of interest; second, existing rates are too high and must be reduced if lenders expect to invest money in Kansas farms long in the future, and it is because farming does not justify 10 per cent. or anywhere near it; third, that if persons who have money to lend are not willing or cannot afford to lend it at such rates as farmers can afford to pay, we are in favor of the general government coming to the rescue and fixing interest rates just as it fixes freight and passenger rates on railroads, and regulates tolls at ferries, bridges and mills; and fourth, we advocate "real dollars," as Mr. Clinton puts it; that is, gold and silver coin, or bullion duly stamped, and paper certificates based on those two metals. Briefly, we advocate good money and cheap money, good security and fair dealings between creditor and debtor.—THE EDITOR.

Mr. Coulter's Defense of His Answers to the Kansas Farmer's Tariff Questions.

EDITOR KANSAS FARMER:—I noticed in your issue of October 23 an attempt by J. Browse Oldrieve to reply to the answers I gave your questions a few weeks since, which attracted my attention, not so much for fairness as the lack of it. It was scarcely necessary for the gentleman to tell us he is a stockholder in a manufacturing establishment in England, and consequently more interested in free trade than in the welfare of this government, for any careful reader of his article would be aware of that. Our friend has the fault of not stopping when he gets through. His last sentence was the "straw that broke the camel's back," namely: "There is one explanation of these so-called 'English' prices which has suggested itself to me, and that is, that Mr. C. has been gulled by forged price-lists similar to those 'extracts' from British papers so freely circulated last year." That is the whole matter in a nut-shell. We are to understand it matters not whether these price-lists are to be found in reports of Consuls or official reports from departments at Washington; they are all to be regarded as forgeries got up on purpose to create a sensation during a political campaign. That is the view every member of the Cobden club takes of it, regardless of facts. The gentleman undertook to be witty by referring often to my being presented as one that was "apt" in the discussion of tariff questions. The term was not mine, but that of the editor of the FARMER, and if he chose to use it he had a right to do so, and it certainly would be regarded by Americans as an infraction of the rules of good breeding or polite usage to use the term in the way the gentleman did. However, under the circumstances, I pass it by. My friend seems to be quite sure I have "put my foot in it." I did not, as a rule, give my authorities when I answered the questions. I expected some one would pretend to know a great deal about the matter and answer me. I knew it would be time enough to give my authorities at some future time, and now when I have done, I will leave it to the intelligent and unprejudiced readers of the KANSAS FARMER to say who has "put his foot in" the farthest.

The critical reader can not fail to note the adroit manner our friend puts his side of the question in order, seemingly, to mislead the reader. For instance, we will take the case of stoves. The gentleman says: "Mr. C.'s English price, \$25; true English price, \$9.60." Did the gentleman say there were no English stoves for \$25? No. Did he say all English stoves were \$9.60? No. But he used language that would

cause the readers of the FARMER to infer that the stove I put in at \$25 could be bought for \$9.60, which he knows is not true. He knows, if he knows anything about it all, there is a \$25 stove selling in England. The firm in Chicago (Cribben & Sexton), whose list I have before me, have cooking stoves for \$8.75, and from that up to \$31. I selected such a stove as a farmer would be likely to buy and compared it with one like it in England. If stoves are so much cheaper in England, why are we exporting thousands of dollars worth annually to that market? Is it possible that our business men are such idiots as to ship \$25 stoves to England and sell them for \$9.60? In 1880, '81 and '82 (see Commerce and Navigation for these years), we exported to England \$636,504 worth of edge tools, \$5,402,430 worth in machinery, stoves, cutlery, files, etc., \$1,531,514 worth of agricultural machines and implements, and \$449,576 worth of carts, carriages, etc. The carts are there, whether our friend ever saw them or not. Now, Mr. Editor, his adroit manner of quoting the price of stoves is a fair sample of the sophistry contained in his whole "expose," as he would be pleased to call it. For instance, we will take wheat. He intimates I gave in my quotations the price that was asked, although he didn't directly say so. It is not true. I gave the cash price at that time (in August). In speaking of the English price, he says: "The returns of last year at Mark Lane, London, give 37s 10d as the price for eight bushels. That is \$1.13 per bushel." What do the readers of the FARMER care for the price of wheat in London last year? My quotations were both on the same day—in Chicago and Liverpool, and of the same grade of wheat. Then he says: "Need I add that wheat selling for 78 cents in Chicago is worth that much (meaning \$1.13) in Mark Lane now?" Mark you, he says, "Need I add." He knows that No. 2 winter wheat, such as I used in my comparison, is not selling for \$1.13 now in Mark Lane. What are the facts? At the date of my quotation, August 27, No. 2 winter wheat was 78 cents in Chicago, and the same grade was 88 cents in Liverpool. At the same date No. 2 spring wheat was \$1.04 per bushel at Liverpool. The gentleman, I presume, thought it would be shrewd to just leave out the word "spring," and let the reader infer it was the same grade upon which I drew my comparison, so as to make my comparison appear ridiculous. Why was he not fair and put the word spring in his quotation? He knew it was winter wheat I used in my quotation, because farmers A and B living in the vicinity of Chicago don't raise spring wheat, especially of that grade. And then he had the gall to intimate that I don't understand the prices when I see them. I now will give briefly my authorities for the answers I gave the questions a few weeks since. I have before me a list of prices from Woods & Long, Store Market, England, giving the prices of grinding mills, harrows, rakes and land rollers, just as I gave them. The gentleman no doubt has picked out some cheap article and presented it, as he did the stoves. Those I have referred to are on sale the same as higher-priced stoves. I have also a list of prices by the Bristol Wagon Works Co., England. They have for sale carts of various kinds, and wagons; and if the word "cart" in England don't mean cart at all, why I am not to blame for that. I quote as I find it. What they call those which we export there, I cannot say; neither do I know to what use they put them. As to cultivators, I shall not claim that theirs look at all like our make, for one of our Consuls says we would not use some of the implements made there, being so clumsy and ill adapted to our use. Doubtless they are put to the same use, so I compared them in price, but did not say they are similar. As to the mower, got my price from one of our Consuls who resided there eleven years. The self-binders, concerning which the gentleman disputes the correctness of my price, I will simply refer him to Special Report No. 56, Department of Agriculture, under date of February, 1883, page 25, which says: "The wire-binding harvesters, American, are sold (C. H. McCormick's) in England for \$25." I know the gentleman claims American machines sell more cheaply in England than at home. Mr. McCormick's testimony will be sufficient upon that point. A letter was addressed him upon the subject, and in his absence one of his employes answered as follows: "Our machines are sold for considerable more money in Europe than the same machines sell for at home. As we sell nearly all our machines f. o. b. New York, we have nothing to do with fixing the retail prices in Europe; but as we get nearly as much net for the machines which go abroad as the same machines are retailed for in some sections of the United States to the farmers, it must be very evident to you or any one studying the question that the farming community of European countries must pay nearly double the amount farmers pay in the United States." This letter is signed by E. K. Butler, and tallies with the official report I have alluded to. Mr. Dudley, Consul to England, who resided there eleven years and traded in the retail stores, says tinware and glassware are as cheap in America as in England, and woodenware 20 per cent. cheaper. He also says that tea is at least 10 cents per pound cheaper here than there, grade for grade. My answers to questions 2 and 3 were taken largely from his statement. Answer to question 4, as far as price of coal and salt in England is concerned, was taken from Commerce and Navigation, issued from the Treasury Department at Washington, and is official. Answers to question 5 are wholesale prices, both in America and Eng-

land, and prepared by prominent merchants of Philadelphia and England. Answers to questions 6 and 12, the prices are largely included in the others and from the same sources. In my answer to question 7 I got the American prices from the Statistical Abstract of the Iron and Steel Industries of the United States, and there can be no doubting their correctness. The foreign price you will find in Commerce and Navigation for 1887, issued under the supervision of Secretary Fairchild, of Mr. Cleveland's administration.

Now, Mr. Editor, why did not the gentleman show us these are all incorrect? After he got through with his stove quotation, he was all "gone," perfectly exhausted, and declared it was "too much weariness of the flesh to further expose Mr. C.'s English prices." He wanted the readers of the KANSAS FARMER to understand that I was deceiving them, and he had a great undertaking on hand by "exposing" me. I have taken the pains to tell your readers from whence I derived my information. These reports are official, and no man in Congress, regardless of party, who regards his reputation as anything, ever disputes their accuracy, and I believe the same will hold true of any person out of Congress. The day is past for any man who is a stockholder in British manufacturing establishment to pronounce comparisons based upon our official reports as a "screaming farce." These reports are not forgeries, but made by honorable men of both parties, men who would scorn to misrepresent the facts. As to the gentleman's remark concerning American prices, wherein he says, "I cannot buy or sell, neither do I believe he can, at retail at the prices given by him, I wish to say, it matters very little to the readers of the FARMER what either of us believe; the facts are what they are after. I have before me the price-lists of two or three firms in Chicago which will bear me out in my statements. I can buy a good suit of clothes—good enough for any of our State officials, in Topeka or Chicago for \$10; you can buy of H. R. Eagle & Co., Chicago, an all-wool cassimere suit, fancy brown checked, for \$8.50; an all-wool black cheviot suit for \$9.35, and ladies' shoes from \$1.25 to \$1.75. These are even lower than the prices I gave. Other goods of all lines are equally as cheap. Permit me to say, also, that in the year 1887 (see Commerce and Navigation) we exported to England of agricultural implements, carriages and horse cars, coal, manufactures of cotton, earthen and stoneware, glass and glassware, cutlery, locks, hinges and other builders' hardware, machinery, saws and tools, stoves and ranges, wire, boots and shoes, soap, refined sugar, tinware, household furniture and woodenware, to the amount of nearly \$10,000,000 worth. Comment is scarcely necessary. In conclusion, permit me to say, I was invited to answer these questions, and I was not dunce enough to have undertaken any such task had I not known I had authorities to refer to, and I am not to be frightened from my position, notwithstanding the gentleman believes me to be "one-sided and strongly singled with that 'localism' and prejudice so characteristic of this State." No State in the Union can boast of men of broader and more liberal views than Kansas, as the returns of any election upon any great question fully attests.

JOHN F. COULTER.

Russell Springs, Logan Co., Kas.

Medical and Surgical Institute.

Many of our readers frequently are anxious to know of some reliable, well-established medical and surgical institute, where they can receive successful treatment of various forms of chronic or surgical diseases which require the services of competent surgeons and physicians who make a specialty of such ailments and because of extensive and successful practice may assure their patients of relief and permanent cure. Such is the Topeka Medical and Surgical Institute, in charge of Drs. Mulvane, Munk & Mulvane, of Topeka, who have been doing business in this line at Topeka for fifteen years, and during that time have treated successfully hundreds of chronic cases which had resisted the skill of local physicians. They not only have a large practice in the capital city, but throughout the State and West generally. They are prominent in business circles at Topeka and command the respect and confidence of all who know them. We often patronize this institution ourselves, and have no hesitation in recommending others to do so. They carry a permanent card in this paper.

New Advertisements.

- Austin & Gray Bros. Imported horses.
Andrews, R. A. 320 acres of land.
Babcock, W. E. Livery stable for sale.
Dietrich & Gentry. Bear for sale.
Graham, H. L. Hon. U.
Guld, J. E. Thresher engine wanted.
Haaff, H. H. New Book.
Hey, Jacob. Dehorning.
Ingersoll Bros. Suction Hook, etc.
Peterson, J. M. Stolen horse and buggy.
Rumsey Bros. Stallion for sale.
Roudebush, E. E. Business College.
Roehr, Oscar. Shotgun.
Stevenson & Peckham. Shoppers by Mail.
Stahl, Geo. H. Indicator.
Seys, Mrs. Ella. Jersey bull.
Trumbull, Reynolds & Co. Seeds.
Allen.
Wood, Mrs. Ruth. Housekeeper.
Williams, W. Musical Box.
Ziller, J. D. Poland-China.

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Officers of alliance meetings will favor us and our readers by forwarding reports of proceedings early, before they get old.

Ben Terrell's Address

A large number of farmers met at the court house, in Topeka, last Saturday, to hear the address of Ben Terrell, National Lecturer of the Alliance. Mr. Terrell is a ready speaker, and he is familiar with the subjects which he presents to the farmers.

He does not favor a third or alliance party. He believes the existing parties will do what the farmers ask whenever they ask it with power to enforce the demand.

Mr. Terrell was annoyed a good deal by noises on the street, made by wagons and street-cars, but he was interesting all the time, and the people enjoyed his address very much because it was thoroughly practical.

Farmers Are Only Taking Care of Themselves

The New York Sun, commenting on the organizations of farmers in different parts of the country and their contracting with particular merchants for special rates on supplies, says: "One trembles to think how profound and vehement would be their wrath against a railroad which should give a special rate to a large customer."

The Kansas City Journal quotes the Sun's words and adds these of its own: "It is hardly conceivable that this method, which builds up one tradesman and ruins his competitors, will prevail for any great length of time. It is very evident, however, that the farmers have made up their minds to show the country that they can create trusts and monopolies as well as other people."

Our contemporaries are in error. Farmers are not organizing trusts and monopolies, they are only taking care of themselves and their own interests. They do not ask anything which is either unreasonable in itself or unjust to their fellow-men in other callings.

they can afford to do it. They know what they themselves can purchase their supplies for by going for them to the same place the merchant does, and if he will deliver goods to them at rates which they can get from the producer or wholesaler, they would rather deal with him and thus keep their trade at home and do their part in supporting home trade.

The Great Meeting at St. Louis

To Delegates to the National Convention of Farmers' Organizations to be held at St. Louis, December 5, 1889:

As the time will be too short after the arrangements have been fully completed, to give notice of reduced fares on railroads and at hotels, etc., to delegates-elect to the convention to be held in this city December 5, next, I now issue the following notice:

Arrangements have been made already with some roads, and no doubt will be with all, by which visitors to the convention can make the round trip for one and one-third fares. This reduction will be made on the certificate plan; that is, when buying tickets of the railroad agent, get from him a certificate that you are coming to the convention.

Notice of reduced rates at hotels and information in regard to the hall for meeting will be published later. But to all who do not see such notice, I will say, call at the office of the Journal of Agriculture, No. 9 North 8th St., which is the headquarters of the Committee of Arrangements, and full information will be there furnished.

PHIL CHEW, Chairman, Committee of Arrangements.

Economy Alliance No. 516, Greenwood County

EDITOR KANSAS FARMER:—As to-day is a rainy, stormy and bad day in general, probably I could find no better time to write a short letter to the KANSAS FARMER. Inasmuch as this paper has been adopted in our alliance as its chief organ, it would be no more than right that we should send in the news, that others may know what we are doing.

About the first of August the first sub-alliance was organized in this county, and as there is only one man that we know of at work organizing this county, it is only about half in full-going operation. The farmers in the northern part of the county are calling for more organizers, so that they may join us and help this well-begun work along.

A motion was made in our alliance at the last meeting that we adopt the following resolution: Resolved, That this alliance solemnly pledge themselves from henceforth not to buy or use any trust meat.

doubt but capitalists will come in our midst and put up packing houses, and then we can sell our hogs at home and have them packed at home, and thus save the expense of shipping them to Kansas City or Chicago to these trusts and combines. But that is not all; we also have the same meat shipped directly back to us for us to consume, leaving these few men whose hands it goes through their enormous profit.

The resolutions adopted by the Jefferson County Alliance were read at our last meeting and unanimously adopted. We see no reason why every alliance should not adopt such resolutions, for when such a state of things are set forth in those resolutions is brought about, then we will begin to see out.

ALBERT SMITH.

Severy, Greenwood Co., Kas.

From Montgomery County

EDITOR KANSAS FARMER:—We have twenty-eight alliances organized in the county, with an average of at least fifty members to the alliance. M. A. Black, of Cherryvale, is our Organizer. We also have a county organization; W. E. Smith is Secretary. We have not established any stores, but have made arrangements with several stores in the county whereby they have pledged themselves to sell goods to alliance members, for cash or produce, at 10 per cent. over cost and carriage.

We had a few good rains lately, and the wheat crop is looking very fine, except a few pieces of late-sowed that is not fairly started yet. There is a large increase in acreage sowed here this fall. Corn-gathering is progressing fairly and is yielding fairly well, though not as good as estimated before gathering time.

From Wichita County

EDITOR KANSAS FARMER:—The alliance is making good use of their organization in this county by purchasing their own coal at a reduction of \$1 per ton. Owing to the drouth corn was not a very good crop, and there is some talk of purchasing corn through some of the Eastern sister alliances.

Grange Convention

There will be a convention of the members of the Grange of Shawnee county, on Thursday, the 28th inst., for the purpose of electing delegates to the Kansas State Grange. The meeting will be held at the grange hall, in Topeka, at 1 o'clock p. m.

Organization Notes

Our alliance friends who have matter of interest for publication, should have the same reach this office Saturday, or not later than Monday of the current week.

The Chautauqua County Alliance have designated the Dexter Free Press as their local organ. It has been doing effective work for the organization, and deserves the hearty support it will undoubtedly receive.

The farmers of Ellis county have been holding monthly meetings since their last annual farmers' institute, and at their meeting on the 2d inst. they decided to unite with the farmers' alliance and sent in for charter signed by all the members present.

Friendship Alliance in Grant township, Osage county, was recently organized, has twenty-five members and has good prospects for doubling that number soon.

will do much toward the objects of the order.

We desire to suggest to alliance secretaries and others who are getting up clubs, that after they have sent in one full club, they may add one or more names afterwards at any time at the club rate.

The Alliance Exchange of Kansas has secured a splendid location on Jackson street, Topeka, in a fine new store building which is about completed and will be ready for occupancy on or before December 15, when the State agent, C. H. Tyler, will remove to Topeka and have charge of the supplies.

Cowley county has demonstrated that when the farmers get together in earnest they can accomplish any legitimate object. The election last week was highly successful, and the candidates on the People's Ticket were elected. It was not a party success, but a farmers' alliance victory.

The December number of the Forum will contain an article entitled "The Farmers' Movement," prepared by the editor of the KANSAS FARMER. It gives the origin, history and present status of this great movement, and will be useful to grange and alliance men for general reference.

The sub-alliance trustee stockholders of Shawnee county met at the office of Roubidoux Bros. in the Odd Fellow's building, and elected H. W. Cheney President, and L. T. Yount Secretary. The Committee on Credentials reported thirty shares represented, which included seven personal stockholders and about ten sub-alliances.

Gossip About Stock

The American Fat Stock Show opens this week and continues until the 21st inst. It will pay every farmer and breeder to attend the same.

Z. D. Smith, breeder of Poland-Chinas, Greenleaf, Kas., writes that he is well satisfied with the KANSAS FARMER as an advertising medium. He can supply almost anything needed in the line of Poland-China.

I. L. Whipple, Ottawa, Kas., has had such remarkable success with sales of Poland-China hogs that in our next issue he will substitute a poultry advertisement instead, as he has a fine lot of the best strains for sale.

At the French Coach Horse Association annual meeting at Chicago last week, S. D. Thompson, Chicago, was re-elected Secretary, and E. R. Bennett, of Topeka, Treasurer. Most of the French Coach horses are owned west of Chicago.

The "Duncan" fence, manufactured by the Wire Fence Improvement Co., 325 Dearborn St., Chicago, is rapidly winning its popularity and big sales on its merits as a wire fence. We advise stockmen who need a satisfactory fence to confer with this company before purchasing.

Marion Brown, Nortonville, Kansas, breeder of Poland-China hogs, writes: "Trade is lively. I ship three pigs to-day to Harry Jones, Beattie, Kas., which is the second shipment to same party this fall, also replied to two pig inquiries to-day, all caused by seeing my name in the KANSAS FARMER, and giving satisfaction on every sale."

We call special attention to the advertisement of a new horse establishment at Emporia, Kas., the property of Messrs. Austin & Gray Bros., importers and dealers in English Shire, Clydesdale, English Coach, and standard-bred trotting horses. They have on hand a choice consignment of grand individuals, which they will sell, if desired, on long time with a low rate of interest.

Topeka Weather Report

For week ending Saturday, November 2, 1889. Furnished by the United States Signal Service, Sergeant T. B. Jennings, Observer.

Table with columns: Date, Thermometer (Max, Min), Rainfall. Rows for October 27-31 and November 1-9.

We have it! A stove that requires neither pipe or chimney. Will heat a room 15x15x10 feet. D. A. MULVANE & CO., Topeka, Kas.

McPherson County Farmers' Fire Relief Association

Endorsed by the State Alliance as the State Alliance Insurance Company of Kansas. A. F. WARR, President. FRANK JACKSON, Sec'y. McPherson, Kas.

I have just traded for a large stock of Hard ware, which I have put on sale at 106 E. Sixth street, and will sell anything in the house, for the next thirty days, by retail at wholesale prices. The stock is very complete and good, and I mean just what I say. Come and see me and you will never regret it. Yours, very truly, L. W. LAWRENCE, 106 E. Sixth street, Topeka, Kansas, U. S. A.

The Home Circle.

To Correspondents.

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

The Old Meeting-House.

I rested in a ruined meeting-house,
And phantoms of the generation gone
Came round about me, reveries to arouse
Of all the phases to which flesh is born.

I saw the pulpit as it stood of yore,
The prayerful preacher telling of the tomb,
The village choir perched up above the door,
And patient listeners in pensive gloom.

Yet not all so, for here and there a look
Of faith and trust sublime with happy glow,
And turn devoutly to the sacred book
In glad submission to the lot below.

On yonder high-backed bench a tiny waif
Of weak humanity in parental arms
Abides the christening, innocently safe
From all the horrors of heretic harms.

A bridal pair with tell-tale blush aglow
Await impatiently the holy word,
Which binds about their hearts the nuptial vow,
The sweetest sound that either ever heard.

And when the sermon ends, the tolling bell,
The silent retinue, the sable pall,
The wail of anguish, the sad story tell
Of sin's just sentence resting upon all.

Those green young boughs fresh budding into bloom,
These bent old branches weather-worn and gray,
Alike have passed the portals of the tomb
And melted like the morning mist away.

Soon sinking as a sunset out of view,
The congregation, choir, and preacher fade,
And but remain the antiquated pew
And empty pulpit, broken and decayed.

And so, methought, the generations glide
And vanish like the vision of the night,
Nor tarry on the inexorable tide
That waits the soul immortal into light.

—Baltimore American.

We may roam through this world like a child at
a feast,
Who but sips of a sweet, and then flies to the
rest,
And when pleasure begins to grow dull in the
east,
We may order our wings, and be off to the
west.

—Moore.

ECONOMY OF LABOR IN THE HOUSEHOLD.

Read before a Michigan farmers' club, October 5, 1889, by Mrs. Ella Wetherby.

This is a subject which should interest every housekeeper, old or young: how we can perform our household duties with least labor, and by so doing gain some time that we can call our own, to devote to visiting, reading, study, fancy work, or to whatever our tastes and inclinations lead us.

I suppose foremost among the means of saving labor are labor-saving machines, and there are many for the house as well as the farm. Those ladies who possess the most of these machines find the most time to work green dogs on blue cushions to bequeath to posterity as samples of their handiwork (rich legacies, these). But let me tell you what my labor-saving machines consist of: A sewing machine, cistern pump, and clothes-pin bag. Now some of you, the men especially, will want to know what kind of a machine the latter is. Well, it is made of good strong cloth, just like a planting bag, only on a larger scale, and ladies, if you have never tried one, do so. I find it a great invention; saves time and labor, and is much handier than holding two or three clothes-pins in my mouth while I hang up a garment. Now some one wants to remark on the size of my mouth, but don't, please. Most of the ladies know how handy a woman finds her mouth many times. I suppose some of the men think they do, too, and wish we would keep clothes-pins in them more of the time.

A kitchen implement which is a saving of time and labor and conducive to good nature is a sharp butcher-knife. I was reminded of this by my own experience the other day. Now I know a great many husbands are so careful of their wives that they never sharpen the knives for fear they will get cut; but never mind, sharpen them yourselves and run the risk. I can tell you it is economy of labor, and I can prove it. The other day I had a chicken to dissect. I knew that knife was dull (for I have one of those careful husbands), but was in a hurry and thought I would not spend time to sharpen it (economizing time, you see), so I went to work and I sawed and pulled and pulled and sawed; after spending as much again time as I should, I got it in pieces. And it was in pieces sure enough; see the time, labor and patience thrown away, all for want of a sharp knife! I might have had time to

read a good love story that day if I had had a sharp knife—or no chicken. I tell this for others to profit by; it has a moral, you see.

Among the many labor-saving machines are found the washing machine, patent churn, carpet sweepers, dishwashers and hosts of others. I can't advertise them, for I never tried them, but I do think of all the machines for turning out labor a good smart woman beats them all, and there's no patent on her either. She ought to vote, she wants to vote, she shall vote, and vote for less labor and higher wages.

A good way to economize labor is to put less furbelows on our own and the children's clothes, and thus spend less time at the ironing-board. I have—yes, I actually have—slept, and slept well, too, on sheets that were not ironed at all! When dry take from the line, fold nicely, snap them out, and I warrant you just as good a night's rest on them as though they had been through the pressing process. Better press less and rest more, for more press means "so tired," and "so tired" means as a general thing hasty words and sour looks. Better gain the rest and give our family kind words and pleasant looks; they will be dearer to their memory in years to come than finely-laundried linen. I have heard girls tell of spending two or three hours ironing a white dress. The foolishness of it! Better been cultivating their minds, pulling out the weeds and sowing new seeds which would bear rich fruit, if not in this in other generations.

Then let us have plainer food, which will take less time and labor to prepare, and save our children from becoming dyspeptics. See how little time and labor the housekeepers of long ago spent on their cookery, and where do we to-day find as healthy a people as they were? By having a place for everything and everything in its place, I will venture to say an hour will be gained every day. I knew a lady whose house was generally pretty well "stirred up," especially her pantry. Ask her for an article for kitchen use, she would go in the pantry, stand and look around and say: "Well, now, let me see; I thought I put it in such a place," and several minutes would be spent in searching for it, minutes which might have been gained for rest.

One might quote any number of old sayings, which if acted upon would save much labor, patience and time. "A stitch in time saves nine." We all know that to be true, for we can mend a small rent in much less time than we can a large one. "Haste makes waste," "More haste, less speed," and so on. Act upon them all and leisure will be yours.

But there are many poor, tired mothers, with large families to care for; mothers who hunger for mental food, but no economy of labor seems to bring them the coveted time for feeding the mind. With no labor-saving machines, and no means for hiring help, how can they find time for even the much-needed rest? Are there any such near us? We who find time for pleasure, then, instead of working green dogs, let's try and lift some burden from a tired mother's shoulder, and we may count our time well spent.

Well, I am like a great many public speakers, I don't practice what I preach. I preach for others to practice, for I never could learn to act on the homely old saying of "letting my head save my heels," and so I keep on treading around, taking two steps where one would do; but I will say in conclusion, ladies, economize all you can, and there are many ways; but if you use your spare time in fretting and talking about your neighbors, better do as I do, keep treading.—Michigan Farmer.

To Soften Hard Water.

When, as is most commonly the case, this hardness is due to the presence of large proportions of the carbonates of lime and magnesia, it can be recognized by the extent to which the water becomes turbid, or forms whitish scum or incrustations when boiled.

Boiling, then, is one of the means for softening waters that are hard and "curdle the soap" from this cause, and this fact is well known to housekeepers, but owing to the inconvenience of the application of this remedy, it is rarely resorted to except for drinking water. For this purpose boiling has the special and additional advantage of insuring the destruction of any minute germs of disease that might contaminate the water.

To soften water for washing, a common

and very good remedy is the use of carbonate of soda (sal soda) in sufficient quantity to bring down the lime and magnesia, and thus insure proper solution of the soap to form suds. Only there is too often a mistake made in not allowing time for the soda to bring down the lime and magnesia in a powdery form, which requires from half an hour to an hour when the water is cold, but occurs very quickly when the water is hot. When, as is commonly done, the soap is put into the water while the lime is still in the gelatinous form and diffused in the water, a certain amount of "curdling" will still happen, and the washed clothes (especially flannels) will have that soggy and unpleasant touch which is caused by the accumulation of the lime and magnesia soaps in them.

That it is undesirable to use soda for softening water to be used for drinking hardly needs more than mention. The natural hard waters usually contain quite as much of saline matters as is desirable in drinking water. Soda, however, does not in any manner correct the sanitary condition of a water; on the contrary, it aids in keeping vegetable and animal matters in solution, and unless added in very large excess, does not interfere with the vitality of fungus or other germs.—California Experiment Station.

Thermometers in the Kitchen.

We hear a great deal about the "luck" some people have in their cooking. Baking especially is often considered dependent upon that vague and fickle element, and all kinds of failure in the food taken from the oven is attributed to the "poor luck" of the cook. Many will say, "I followed the recipe exactly," or "I made my cake to-day just as I did yesterday; yet one is good, the other very poor." The truth is, very few cooks make articles of food exactly alike twice in succession. If the ingredients are the same, and are combined alike, the heat into which they are put to be cooked is very likely to vary greatly from one time to another. Much of the "good luck" of many cooks comes from ability to judge of temperature; and when we learn that it is much easier to have our temperature always right than to guess at it, we shall insist upon thermometers for our ovens, and depend upon them for proper degree of heat.

Butter-makers here come to the point where they consider the thermometer essential in preparing the cream for the churn. The woman who formerly churned three hours on a cold morning has found that by using her thermometer to test the cream she can apply heat, and raise the cream to about 60° before she begins to churn; and, saving time, strength and temper, find her butter even better in the end than by commencing to churn when the cream is too cold. Exact testing prevents the spoiling of the cream by the application of too much heat. With baking, the same principle holds good. The directions in the cook-books, good as they are, are very indefinite. For bread, we are told to put it into an oven so hot the hand cannot be held in it more than the time it takes to count twenty." We are further told to let our bread become as brown as we wish it by the time it has been in fifteen minutes. No two hands can endure the same amount of heat. A definite direction would say, put the bread into an oven at 400°; during the first ten minutes cool it gradually down to 325°, then hold the heat between that and 300° until the bread is done,—giving the time for baking a loaf of certain size. A very little experience will teach the cook how long loaves of the size and shape she likes to make must be baked.

The same holds true of all food cooked in an oven. There is much difference between the heat required for a cake and that needed for a pie or a pan of biscuits; and as much art is required in baking as in making.

We roast meats in our stove ovens. While it requires only a temperature of from 140° to 170° to perfectly cook the fiber of the meat, in order to cook a roast properly the outside must be seared over so that the juices will not escape. The heat must be sufficient to sear the outer surface, when the oven may cool down and the remainder of the cooking be done slowly. The essential strong heat, however, is at first, and only with a thermometer can the cook know that her oven is right, and avoid either the scorched roast, or the dry, juiceless meat. There is much need in cooking for exact recipes, and for

exact measurements, but there is quite as much need for exact heat.—Mrs. Kedzie.

Notes and Recipes.

In boiling a pudding leave room for it to swell. If cooked in a mould do not fill it full.

For sumac (dogwood) poisoning make a strong solution of alum water and bathe the affected parts freely for a few times and it will effect a cure.

To remove kerosene from a carpet, lay blotters or soft brown paper over the spot and press with a warm iron. Repeat with fresh papers till the spot is removed.

A glossy starch is made by mixing together a quart of starch, a teaspoonful of salt and one of white soap scraped fine; boil after adding hot water until as thick as you wish.

In toothache, if the pain extends upward toward the eye, or takes the form of neuralgia, get some horseradish leaves, take out the stems, wet them and apply to the face over the pain. This will usually give relief.

Saturate the edges of carpets with a strong solution of alum water to destroy moths; if an unpainted floor, wash the floor with it before putting down the carpet. Do the same to shelves where black ants appear.

Oilcloth may be improved in appearance by rubbing it with a mixture of half an ounce of beeswax in a saucerful of turpentine. Set this in a warm place until they can be thoroughly mixed. Apply with a flannel cloth, and then rub with a dry flannel.

Pretty table mats are made of a kind of momic cloth, which is quite heavy and figured with rosebuds. The rosebuds are worked in pink and green crewels. The mats should be of various sizes, and oblong, not round, and the edges are finished with white cotton fringe.

To take varnish off of furniture use a solution of about eight pounds common washing soda to a gallon of water. Apply this to the work with a common paint brush, and after allowing it to stand for a short time the varnish can be removed with an ordinary stiff scrubbing brush.

Equal parts of strong ammonia water, ether and alcohol form a valuable cleaning compound. Pass a piece of blotting paper under the grease spot, moisten a sponge first with water to render it "greedy," then with the mixture, and rub the spot with it. In a moment it is dissolved, saponified, and absorbed by the sponge and blotter.

All the World's a Stage,

and to enable every one to act his part well needs that he shall be in perfect health. The very best of actors require prompting occasionally, and so it is with the functional parts of our bodies, they sometimes require prompting. A sluggish liver, impaired digestion or weak stomach, if taken in time, only need a little prompting to set them right, but if neglected may lead to complications that will necessitate a physician's care. An article that has, comparatively speaking, been but recently introduced in America, is by far the best little prompter in all the aforementioned cases. We refer to Beecham's Pills, a staple article in England, having been before the British public for over fifty years and already in great demand in every other English-speaking country throughout the world. These pills are really a wonderful medicine, arousing and strengthening the system and prompting every organ to the proper performance of its part. It has recently been shown that they are nine times more used in England than any other patent medicine and have the largest sale of any in the world. They can be obtained of any druggist for 25 cents, or from the sole agents for the United States, B. F. Allen & Co., 305 Canal St., New York city, who will forward them to any address upon receipt of price.

A fowl fancier writes that neatly white-washed roosts and fences make the poultry yard look clean, but the whitewash has more effect in subduing or preventing the multiplication of lice if some death-dealing substance is incorporated with it. Carbolic acid is death to lice, and if mixed with the whitewash in the proportion of an ounce of the acid to a gallon of wash, it will not only destroy the lice that it touches, but because of the porous character of the wash the acid will continue to be effective for several months. A good plan is to whitewash as early in spring as possible, thus making the coops inviting to the sitting hens. Such labor always pays, and especially at this season.

Mild weather in winter is the very best time to do outside painting.

The Young Folks.

The Old Arm-Chair.

I love it—I love it, and who shall dare
To chide me for loving that old arm-chair?
I've treasured it long as a sainted prize—
I've bedewed it with tears, and embalmed it
with sighs;
'Tis bound by a thousand bands to my heart;
Not a tie will break, not a link will start.
Will you learn the spell? a mo' her sat there;
And a sacred thing is that old arm-chair.

In childhood's hour I lingered near
The hallowed seat with listening ear;
And gentle words that mother would give,
To fit me to die, and teach me to live,
She told me shame would never betide,
With truth for my creed, and God for my guide;
She taught me to lisp my earliest prayer,
As I knelt beside that old arm-chair.

I sat and watched her many a day,
When her eyes grew dim and her locks were
gray,
And I almost worshipped her when she smiled
And turned from her Bible to bless her child.
Years rolled on, but the last one sped—
My idol was shattered—my earth star fled;
I learn't how much the heart can bear,
When I saw her die in that old arm-chair.

'Tis past! 'tis past! but I gaze on it now
With quivering breath and throbbing brow;
'Twas there she nursed me—'twas there she
died,
And memory flows with lava tide,
Say it is folly, and deem me weak,
While the scalding tears run down my cheek,
But I love it—I love it, and can not tear
My soul from my mother's old arm-chair.

—Eliza Cook.

All are architects of Fate
Working in these walls of Time;
Some with massive deeds and great,
Some with ornaments of rhyme.

—Longfellow.

THE EIFFEL TOWER.

This is an ingenious structure, over a thousand feet high, the tallest work of art in the world. It was designed by a French engineer, and stands in the city of Paris.

Mr. Murat Halstead, of the Cincinnati Commercial Gazette, who recently visited the Eiffel tower, thus replies to many questions which have been asked concerning it:

What effect has the heat of the sun upon the structure? The increase in height during a very hot day is said to have been seven inches. Is advantage taken of the extraordinary altitude secured to make scientific experiments? Certainly. I noticed from the cage, when ascending, that heavy plumbets were suspended at intervals. The use of them doubtless is to ascertain the extent of the vibration in the wind, or the degree to which the lofty edifice is affected by the machinery. One can feel the force of the wind, which was blowing a strong breeze when I was at the greatest height, quite sensibly, and there is noted a slight trembling, imparted by the movement of the elevators. Is it cold on top of the tower? Not with ordinary observation to a perceptible degree, but many people state that their hearing is troubled at the utmost elevation, as in climbing mountains. What is the cost of getting up the elevator? It is five francs to the top—two francs to the first platform, one thence to the second platform, and two from the second to the summit. How many elevators are running? Four. There are two from the foundation to the first platform—one stopping there and the other going to the second direct—and two from the second to the top, each of the latter lifting about three hundred feet.

How many people are taken at once in the cage that goes to the top? I think the number is sixty. There are no seats in the square boxes, with the sides partially of glass, that are employed in the high places. There are seats in the lifts to the lower platform. The guard having charge of admission punches a certain number of tickets for the top at the station on the second platform and then closes the door. What change is made between the third and fourth elevators? Simply that of transfer of passengers from one cage to another. How large is the first platform? The exact measurement I have not taken pains to learn, but think there is about an acre. The central portion of it is open, and one looks over a railing upon the inner fountains. What safeguard is there against fire? Immense iron tanks, looking like boilers of a great ship, filled with water, are on the second platform—the elevation is about three hundred and fifty feet. The arrangements are such that if any of the wooden structures on the platform or the material knocking about that is combustible should get on fire, the flames would be speedily overwhelmed. What provision is made for drainage? There are large iron pipes extending to all the platforms and connecting them with the sewers.

How far are people permitted to ascend

on foot? They can go as high as the second platform, and pay the same for the privilege that they are charged for riding in the elevators. What is the arrangement for those on the stairways to pass each other? There are two lines of stairs, or series of stairways, one for ascending and the other for descending, and no one is permitted to go the wrong way on either of them—therefore there is no meeting or passing on them. The stairs in the midst of such a colossal edifice look slender, but are quite strong and shrouded in oil cloth, to prevent those who venture on them from being affected by giddiness. Going down the stairs is rather more ticklish to the average head and foot than going up. It is trying to look off through the prodigious iron lattice work that rises into the skies and behold the great city at one's feet. There is a sensation as if one might possibly step out into the air and find even a sustaining cloud. Are people permitted to walk to the top? They are not allowed to go, except in the elevators, above the second platform. There is a stairway for the extreme ascent, but it is used only by the workmen, and I saw no one on this perilous path, which winds above the central pillar, that is a tube, until it seems to fade into the fine lines of the thread of a screw. There are few heads strong enough, I fancy, to ascend to the dizzy elevation upon the giddily spun web of steel, and few, indeed, who could get down that frightful way. There is no communication between the platform from which the upper elevators run and this celestial stair. There is freedom about taking the stairs from the bottom and from the lower platform to the second.

What provisions have been made that there shall not be a dangerous mass of people at the top of the tower? If the crowd becomes too large, the elevators are stopped. This does not happen often, because the usual individual when he has reached the extreme height, and given a few minutes to observation, is quite willing to descend, and does it with a sense of having accomplished something worth talking about. Many give indications of a feeling of exhilaration over the achievement. They are glad they have done it, and do not want to spoil everything by waiting for anything queer to happen. What is the explanation of the delay in using the elevators, of which so much has been said? Why does it take hours to get to the top? Simply the fact is the throng is so great that people are detained in queues waiting their turn. Such is the crowd on the second platform in the afternoon engaged in the tedious task of going to the top, that many stand for two or three hours in the queues; and thousands are restrained by this trouble from making the complete ascension.

What is the contemplation of the French people as to the permanence of the tower? The contract provides for twenty years, and there are delicate and important questions as to the possible changes during that time in the material employed. It is proposed to keep the tower well painted. Have any deflections of the tower from the perpendicular been noticed? I think not. Constant attention is paid to that matter, and in case a variation from perfect uprightness should occur, it would be instantly shown by the fine instruments employed; there are hydraulic jacks fixed in the foundations, which would be applied to rectifying the inclination.

What is the peculiarity of the appearance of the lights at the top of the tower? There is noticed first a steady and starry glow at the solid summit, and there are search lights thrown out, at times colored; and these are most conspicuous when the atmosphere is misty, forming long, luminous tracks through the air, the intensity and breadth of the streams of splendor being in harmonious proportion with the uplifted fountain from which they flow. The tower is the great feature of the exposition, and the whole French nation is excited concerning it and pleased with it, and the rush from the provinces to see it guarantees the success of the exposition.



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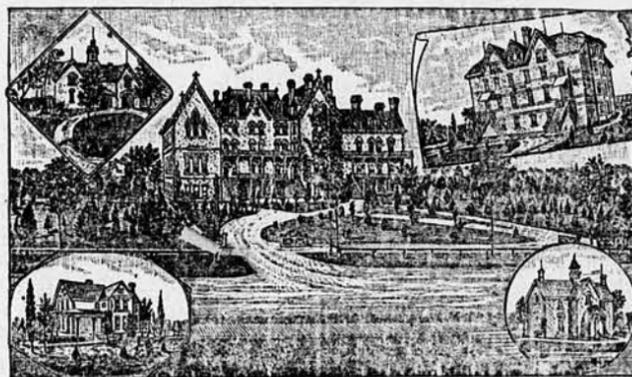
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Thanksgiving Day is the 28th inst.

A Wichita county farmer reports excellent wheat in that region this year.

Dr. Geo. C. Pritchard, veterinarian, has removed his office to 515 Quincy street, Topeka.

Snow was reported at several points in Kansas Monday from Wichita to the west line of the State.

The cottonseed oil trust has been re-organized. It is now simply a corporation with \$35,000,000 stock.

Henry Clews, banker and broker, New York city, says he thinks the wheat market will improve.

The elections last week show large Democratic gains in New York, Virginia, Ohio, Iowa and Kansas.

The Missouri State Horticultural Society holds its next annual meeting at Lebanon, Mo., December 3 to 5 inclusive.

Report from Greeley county shows wheat in good condition. About two and a half inches of rain fell at Tribune in October.

The four new States have all been formally admitted by proclamation, North Dakota, South Dakota, Montana, and Washington.

Broomcorn has proved to be a profitable crop in Kansas this year. Rice county farmers will receive at least \$50,000 for theirs.

During the year ending June 30, 1889, nearly a million and a quarter frozen mutton carcasses were shipped from Australia to Great Britain.

The Agricultural Department at Washington puts the average corn yield of the country this year at twenty-six and a half bushels per acre.

A correspondent writes to inquire what a farm paper can discuss that will have more interest for its readers than money matters. We don't know.

The public debt statement, October 31, ult., show gold certificates outstanding to be \$121,175,112; silver certificates, \$277,611,675; legal tender notes, \$815,434,401.

Mr. Parkinson, the sugar man, is reported as saying that persons interested in Kansas sugar-making intend putting up a sugar refinery somewhere in central Kansas next year to cost about \$250,000.

We have an interesting letter from E. W. Brown, concerning the deep water harbor on the Texas coast. Mr. B. was on the ground and tells what he saw and heard. His letter will appear next week.

TARIFF QUESTIONS ANSWERED.

We have on file a good many questions concerning principles of tariff legislation, and concerning the practical operation of tariff laws. We will answer them *briefly*, grouping them in classes.

1. A correspondent wants to know what we want a protective tariff for if it be true that "we can buy cheaper in the United States than in England." ... In the first place, we cannot buy cheaper here than there, except some articles of particular classes, and those chiefly such as are used mostly by farmers and other persons who are engaged in manual labor. These include farm implements and machinery, many articles of hardware, as stoves, hollowware, builders' tools, furniture, tinware, common crockeryware, and glassware, common grades of cotton and wool cloths, flannels, prints, coarse, heavy ready-made clothing, shoes, etc. The reason why we want a protective tariff on these is that we may retain our own market for goods that our own people can and do make as well and as cheaply as foreigners could or would if they had control of the market.

2. How can people of this country compete with people of other countries when labor is cheaper there than here? ... For the reason that the best paid labor does the most work. Much of our machinery is better than that found in any other part of the world, and it turns out more work to the man. A great deal of work is still done in the old countries by hand in the houses of the people, and machines beat hands at work. Labor in this country thirty, forty, fifty years ago, was much cheaper than it is now, yet we produce everything except sugar cheaper now than ever before.

3. What can hinder competing labor in other countries from flooding this, if labor here gets better pay than elsewhere? ... Nothing. And that is a weak point in our laws. We have been trying to protect our own labor, though we never, until recently, undertook to prevent the landing of one immigrant. Our practice has been free trade in labor, allowing our workmen to remain subject to competition of foreigners who choose to come among us. The practice, however, caused no uneasiness until in recent years, when some of our more greedy manufacturers began to import people who, on account of their poverty, would probably never have come. It is from this class only that any irritation has been occasioned among our own people. The law now prohibits the importation of labor under contract, and several persons have already been punished sorely for violating its provisions. The only safe rule in this matter is to enforce that law rigorously and cut down tariff duties low enough to cover the difference in labor cost where there is any difference, maintaining high duties on such articles as we can supply our own markets with cheaply, putting on the free list all articles which we do not produce at all, or not in quantities large enough to affect the price.

5. Would it not solve many difficulties if the price of labor could be equalized through the world and every country produce what it best can, and have the world's markets free to sell it in? ... Yes, provided the price of labor in other countries were raised to our standard; but if our wages are to be reduced to the lower standard of other countries—Germany or Austria, for example, it would not work at all. Let us maintain high prices for labor and give workmen plenty of work to do; that will make customers for the farmers.

6. Do not farmers in this country compete in the world's markets without the help of tariff protection, while at the same time they pay higher prices for labor than is paid in other countries and also pay cost of shipments to such markets? ... Yes; but without such

"tariff protection," which began sixty years ago, they would now be competing in the "world's markets" on a much larger scale than they are; for while they now send off only about 8 to 10 per cent. of their products, formerly they sent out 90 per cent. or more. The tariff set vast numbers of people at work in factories, and they gathered other people about them, making towns and cities—so many markets at home for what farmers have to sell. In the beginning about 90 per cent. of our population were farmers, and they were supplied with manufactured goods almost wholly from abroad, except only such of the coarser kinds as were made in the people's homes. Now we not only supply ourselves wholly with a great variety of articles, but we export over \$100,000,000 annually.

7. Has there been a law passed to the effect that a tariff may be laid on imports for the purpose of protecting home manufactures? ... No. Such authority, if there were any, would be found in the constitution. The primary object of all tariff legislation is *revenue*. Protection is secondary; it is effected by the *adjustment* of the duties which are laid for revenue. The rule and the practice are to estimate what amount of revenue is needed, in time of peace, or what amount can be made, in time of war, from tariff duties, then, if protection is desired, so adjust the duties as to have that effect, not going beyond the amount of revenue estimated. There never was a tariff bill passed in this country expressly for protection. No such authority was ever claimed by any party. The arrangement of revenue duties so as to afford protection to home industries is an exercise of legislative power under the grant to "provide for the general welfare."

8. Have you "Peffer's Tariff Manual" on sale? ... Yes, we have a few copies left.

Silver is an American Product.

In view of the near approach of a general discussion of the silver question at St. Louis, the following paragraph which we find in the *Textile Record* of Philadelphia is in point:

"The influence of silver upon prices of commodities is not generally recognized, but it deserves very close attention from the American public and particularly from manufacturers. There can be no doubt, we think, that the depression of prices of articles which has prevailed for several years is chiefly due to the discrediting of silver by Germany and the subsequent suspension of the operations of the Latin Union. The effect of these movements was to enhance the value of gold by increasing the demand for it, and at the same time to strengthen the prevalent disposition to measure everything by the gold standard. Thus it came about that more silver bullion, more cloth, more iron, more wheat, more of everything produced by human industry, was required to buy a gold dollar. Or, to turn the thing the other way, a gold dollar would buy a greater quantity of any of the materials of industry—that is to say, the prices of the latter were thrust downward. Now, if England and Germany could be induced to put the two metals on an equal footing and the Latin States once more should stand together in the matter of silver coinage, the value of silver would advance, the value of gold would decrease, and the prices of all commodities would increase. Less labor would be required to get a gold dollar, or, to put it the other way, a gold dollar would buy less of the fruits of labor—prices in short would advance. In this view the importance of the policy of our government in strictly adhering to the coinage of silver is evident. But for this the prices of silver and of other articles would tumble further. The assertion may be ventured that abandonment of this policy would inflict frightful injury

upon the country and would make really hopeless the acceptance of bi-metallism by the mono-metallic nations. Silver is an American product, and it is good Americanism for us to stand loyally by it."

STOCKMEN'S CONVENTION AT TOPEKA.

In compliance with written and verbal requests from a considerable number of farmers and persons engaged specially in raising and feeding live stock, the KANSAS FARMER hereby calls a convention of farmers and persons engaged in raising or feeding livestock—horses, cattle, sheep or swine—for market, to be held at the city of Topeka on the second Wednesday in January, 1890, that being the 8th day of the month. The particular place of meeting will be announced hereafter.

The object of the convention is to consider the present depressed condition of the live stock industry, and to suggest means and measures of relief. The State Board of Agriculture will be in session at the time and that will insure the presence in Topeka then of a considerable number of farmers and stockmen from different parts of the State.

It is particularly desired that the convention be well attended by representative men, so that its proceedings will have weight with such persons or bodies as it may be determined to address specially.

Let every farmer and stockman make it a point to assist in some way. And let those who attend prepare themselves to take part in the discussions.

Sugar at Fort Scott.

A private report from the Fort Scott sugar factory shows the number of tons of cane handled by the plant there this season was about 7,000; owing to a late planting, only about one-half of this was worked into sugar, the balance run into sirup. The amount worked into sugar yielded 140,000 pounds; the sirup produced was 100,000 gallons; seed, about 75,000 bushels. The cost of cane per ton, \$2; cost to work it up per ton, \$1. Salaries, insurance and other expenses, about 50 cents per ton. A ton of such cane as was raised there this year will make fifty-one pounds of sugar, fourteen gallons of sirup, and about two bushels of seed. What sugar has been sold this season brought 6½ cents per pound; sirup, 11 cents a gallon; the seed, which is yet unthreshed, at a low estimate, is worth 25 cents per bushel. When asked if the business would pay the stockholders a dividend, Mr. Parkinson said the business would pay a dividend, but being in debt the surplus, instead of being paid to the stockholders would be paid on the indebtedness.

To Correspondents.

We have some communications on file which will hardly find room in the KANSAS FARMER. They relate to financial questions which have been discussed in these columns frequently, and they express no new ideas, nor do they make a new application of old ideas. Were they short and pointed we might make room for them, but they are very long. Nothing is more important to farmers now than finances, and anything like a general treatment of only one point requires a good deal of space, as our readers have seen demonstrated in these columns the last few weeks, and for that reason unless a writer has something new, or something so dressed as to be especially good even though old, the editorial heart beats warmly toward that man. We cannot possibly accommodate all who write on these great subjects, and are therefore compelled to make selections, which we do having due regard to the interests of our cause. When a new thought comes whispering in your ears, or when an old substantial thought comes along in new garb, send it in and we will take care of them.

INTERESTING LETTER FROM OKLAHOMA.

Rev. W. F. File, with whom many of our readers are acquainted, a man of good judgment and quick observation, spent a few days in Oklahoma about the first of the month, and wrote out the following interesting sketch of his trip for the Sunday *Capital*, from which we copy. [We had not room for it last week:]

We entered by way of the popular Rock Island route, and whirling rapidly through the sixty-two miles of the Neutral Strip traversed by this line we find ourselves on the border of the much-talked-of territory of Oklahoma. A glance at the map will reveal the fact that the country is traversed by numerous large streams, and as we come to them in the course of our journey we are not disappointed in their size or the volume of water that rolls between their banks. The landscape is more diversified than that of Kansas, a larger portion being covered with natural growth of timber. The soil of the valleys is a light, sandy loam; they are broad and level and produce luxuriant blue stem and bunch grass. The uplands gently undulating, having a heavier soil, rich in all those qualities necessary to grain or grass-growing. There is but little waste land, or lands that are blighted by alkali deposits. The rivers are constant, some of them having their sources in the mountain regions of New Mexico, and there is abundance of water beneath the surface at a shallow depth.

I have been asked many times: Do you think this country will prove to be adapted to farming? I answer, yes. We might come to such a conclusion without a visit if we but stop to consider that it lies between two great regions whose adaptability and capability have been tested. Kansas on the north and Texas on the south have sufficiently demonstrated themselves in these directions, and it would be strange indeed if a region lying between them, with numerous large rivers and having the same general characteristics, should prove to be unlike them in productiveness. Whatever else we may say about the region we must conclude that this is a chip off of Kansas so far as soil is concerned. The climate is milder than that of Kansas. The growing seasons will consequently be longer, a greater diversity of crops may be grown with success. The cereals can all be grown either on upland or in the valleys. Corn will have a very formidable rival in cotton; castor beans and sorghum will be produced in perfection almost. The soil and climate are especially adapted to fruit-raising. If the reader should visit the territory six years from now he will witness what can be done in peach, plum and apricot-growing. Fruits that fail here, as a rule, will reverse the matter there if I am not greatly mistaken. Then it is certainly well adapted to grape-growing and to small fruits. The wild fruits of this region are of great variety and of fine flavor.

But I must not devote more space to this part of the subject. The country is well settled by intelligent people, who will not easily relinquish the purpose they have formed to secure a home in this new country. Many of those who are there are poor, and they will see some stormy times, but I believe the most of those who have taken claims in good faith will hold to them until they secure a title. As has always been the case, there are adventurers among them whose purpose is to get the most of the situation and then abandon their claims or sell them for whatever they can get. I talked with many of the farmers and they are brave, intelligent and persevering. I have no doubt these great qualities will be truly tested ere they have secured their titles, but they are equal to the task.

The state of things civilly is unique. Where could a community, beset with so many obstacles, and hedged about with perplexities as is here, and so generally keep the peace with but a shadow of law. The rights of citizens have very indefinite delineation by the statutes of the general government, and as for local authority there is none. The people who expected anarchy and bloodshed were completely disappointed.

The religious status of the people is being looked after. Many faithful ministers are already in the field. Excellent Sunday schools are maintained in all the places I

visited. The Methodists, as is usual with them, have the advantage in the start and in numbers; following them the Baptists rank next in numbers, but are sadly behind in organization. The Presbyterians are second in organization and are pushing their work under some excellent leaders. The first Protestant house of worship was built by the M. E. church and was dedicated Sunday, October 27, at Oklahoma City. The Presbyterians have the foundations down at Kingfisher.

No provision has been made for public schools as yet, but schools are in progress in nearly every community where there are scholars enough to maintain them.

The city of Kingfisher is the present terminus of the Rock Island railroad, which has just been completed to that point. The grading is being pushed southward, and by the first of January the cars will reach El Reno, three miles south of Fort Reno. From that point there will be two lines built by this company, one to the gulf and one to the southwest. Kingfisher is well located, is the center of an excellent country, and its citizens may well be proud of its growth and business importance. The Rock Island is reaping a good harvest in freights. The past thirty days they have hauled out of the territory four to nine trains of cattle a day, averaging 500 to the train, and the traffic will continue six weeks yet.

Reno, Darlington, Fort Reno and El Reno, twenty miles south of Kingfisher, are on the North Canadian in a beautiful and fertile valley. Reno and El Reno are towns which have been built up since the country was opened. Darlington is the trading post of the Cheyennes and Arapahoe Indians. The agency and the schools of the tribe are here. The fort is on the left bank of the river, beautifully located, everything shows good keeping and it is a place you would enjoy visiting. The schools of the agency are in charge of careful, well trained teachers, and the Indian pupils are making progress. The Cheyennes and Arapahoes are slowly learning the art of peace. They live in tepees, tall, sharp-pointed circular tents. They have five farmers or overseers who superintend their agricultural matters. Their corn crop this year was an excellent one. Taking the stage at Darlington I went down the North Canadian valley, thirty-five miles to Oklahoma City. This is a prosperous town of perhaps 3,000 people. The Canadian valley is as fine as can be found in America and is destined to be the home of a prosperous people. The Atchison, Topeka & Santa Fe railroad is the thoroughfare of commerce and travel to this city. The trade of the town is already extensive and is daily increasing. A company has been formed to dam the Canadian with the object of furnishing water power for milling, electric light, and manufacturing purposes. They have a good country and will not be satisfied with less than a good city.

Guthrie is the largest of the towns of the new territory. There is at a fair estimate 6,000 people here and already many manufacturing industries have come into action. The city is well located, has a large area of fine farming lands about it, and it will probably easily maintain itself as the metropolis of the country.

There are many items of interest that might be said, but I must forbear. I believe a visit to Oklahoma will repay all who essay it and but an imperfect idea can be gained without seeing it.

The American Horse Show.

The American Horse Show at Chicago was a magnificent showing of every class of horse stock, from the smallest Shetland to the heaviest draft including every class of standard-bred, saddle and driving horses of every description. The leading importers were on hand with their choicest consignments of horses. It was mainly an exhibition for revenue and entertainment and was well patronized by the people of Chicago and the "bloods" and the "snobs" were potent manipulators of the show. The general farmers' interest was of no consequence apparently as the main object of the management was for revenue strictly. The agricultural press was not recognized except under strong protest. The management took great care that the exhibitors and visitors should not be contaminated by the

sight of farm and stock papers as they prohibited their distribution.

The draft horse exhibitors were dissatisfied with the management and are taking steps to obviate the disadvantages another year. They prefer to show in conjunction with the American Fat Stock Show on account of the class of visitors it brings, who are more apt to be interested in draft horses. The American Horse Show is a great institution in behalf of the improvement of stock unless, as this year, it is run for the gratification of sports rather than for the edification of animal-raisers.

Adulteration of Butter.

A "greasy compound" is being sold to farmers for use in adulterating butter. It is a private way of seducing farmers into the oleomargarine business. The KANSAS FARMER is in possession of reliable information on the subject and would be pleased to communicate with the officers of the State Dairy Association.

Anti-Horse Thief Association.

Reports to the meeting of the Kansas Anti-Horse Thief Association at McPherson last week showed 200 subscribers in the State, with a total membership of 8,360. The following officers were elected for the ensuing year: President, G. M. Hoffman, Parsons, Labette county; Vice President, H. E. Barton, Gray county; Secretary, W. B. Riley, Girard, Crawford county. The next annual meeting will be held at Independence, Montgomery county, in October, 1899.

Forest Tree Distribution.

Hon. Martin Allen, Commissioner of Forestry, sends in the following circular to be published for general information:

Residents of the State of Kansas wishing to secure a share of the seedling trees for free distribution at the Kansas State Forestry Stations, at Ogallah, Trego county, and Dodge City, Ford county, should carefully fill out the following blank application, and return the same to me at either of the above-named places, or to Hays City, Kansas, for spring delivery, not later than March 1, 1899.

MARTIN ALLEN,
Commissioner of Forestry.

The blank is forwarded to persons on application to the Commissioner. It ought to be attended to at once so as not to be delayed in the spring. Address him a postal card, asking for blank order. Kansas farmers can get trees cheap now.

During the fiscal year ending June 30, 1888, the value of all articles exported from the United States to foreign countries was \$683,862,104, of which amount agricultural products amounted to \$500,840,000.

CASTOR BEANS.—A friend in Wichita county, writing in behalf of many farmers, wants the benefit of some practical bean-raiser's experience. In the southeastern counties there are plenty of men who know all about this subject, and now that evenings are getting long, they will doubtless help our western friends on the bean question.

A Crawford county farmer writes us advocating free sugar with 2 cents a pound bounty to home producers, 1 cent going to the manufacturer, the other going to the farmers that raised the cane. He wants the same method adopted with wool—put wool on the free list and divide the bounty between producer and manufacturer. But he does not suggest the amount of the wool bounty.

Mr. H. F. Mellenbruch, of Brown county, says the corn there is turning out more than was expected—fifty to sixty bushels per acre. He says further: "The weather this fall has been beautiful for work, but too dry for vegetable growth, especially fall wheat. The fall rains did not come till the end of October. Some fall wheat is not up yet, there having been no soaking rains between August 12 and October 31. The temperature has been remarkably uniform, a little cool, but very little frost yet, so that late potato vines are not all frozen even at this date (November 2). It is clearing up now from a

two days' gentle rain; one and one-half inches fell. Stock in this part of the county is doing well. There were several cases of hog cholera, but it does not seem to spread. A considerable number of cattle are being fed. To feed cattle in connection with hogs seems to be the best way to dispose of our corn crop, even if cattle are low. There have been a great many public sales this fall, sometimes two or three in one day. Stock cattle sold discouragingly low. We thought they had reached bottom prices last year; but this year is worse."

Book Notices.

HORNS AND SPAVINS.—H. H. Haaff sends out a neat little pamphlet free to persons interested in dehorning cattle and in curing spavins on horses.

IMPROVEMENT OF HIGHWAYS.—This is a little seventy-five-page pamphlet published by the League of American Wheelmen, and sent out to persons and committees in charge of highways. The object is to awaken an interest in the improvement of roads. The book may be had of the Secretary of the L. A. W. by enclosing a 2-cent stamp. Abbot Bassett, Secretary L. A. W., Box 5257, Boston, Mass.

WESTERN RURAL YEAR-BOOK.—This is a book of much value. It was prepared specially for service, and the author, Milton George, of the *Western Rural*, succeeded admirably. It is a large book brim full of facts, little and big, which nearly everybody wants to know. It is especially useful in a family where there are young people. They can refer to it on a great many questions which arise among inquiring people. Address *Western Rural*, Chicago, Ill., for price.

CRISIS FOR THE HUSBANDMAN.—This is a pamphlet of fifty-six pages devoted to a discussion of matters which are just now of special interest to farmers and working people generally—profits, monopolies, trusts, the tariff, and a general view of the farmers' condition in comparison with that of other persons engaged in other callings. The work was prepared and published by Col. Percy Daniels, C. E., Girard, Kansas. It will well pay any interested person to read this book. We do not know its price.

CENTURY.—The *Century* has in preparation a series of papers on topics relating to The Gold Hunters of California. The articles will be prepared for the most part, as were the War Papers, by prominent participants in the events which they describe; and they will include accounts of Early Explorations, Life in California before the Gold Discovery, the Finding of Gold in 1848 at Sutter's Fort, the Journey to California by the Different Routes (around the Horn, across the plains, by Nicaragua, and by Panama), Life in the Mining Camps and in San Francisco, and other important aspects of California life at the time.

THE FARMERS' MOVEMENT.—The *Forum* for December will contain an article entitled "The Farmers' Movement," which gives the origin, history and present condition of the movement among farmers which began in 1867, and is now spreading with wonderful momentum. The grange, being the oldest farmers' organization, is treated first, then the alliance, union, wheel, Mutual Benefit Association, etc., are mentioned in the order of their beginning. The article was prepared by the editor of the KANSAS FARMER, the object being to attract attention to this Farmers' Movement in a circle of readers where farm journals are not much read. It is a condensed history which will be found serviceable in public meetings where a larger book would be inconvenient. The *Forum* is published monthly at 253 Fifth Avenue, N. Y., at \$5 a year or 50 cents a single number. It is ready for mailing on the 25th day of the month preceding that of its date.

HISTORY OF THE WHEEL AND ALLIANCE AND THE IMPENDING REVOLUTION.—Some weeks ago we called attention to this book. It is quite a large volume, over 500 pages, and in addition to the "History of the Wheel and Alliance," which occupies the first part of the book, the author treats every subject of interest to farmers in the present state of the public mind. The style is simple, and the temper is admirable. The author, Mr. W. S. Morgah, of Hardy, Arkansas, spent a great deal of time and thought on his book, and there is no room to doubt the purity of his motives or the honesty of his convictions. He treats the general subject of "Labor's Wrongs" in detail and he produces many instructive facts to show the need of organization and reform. We append a few sample notices of the work: "I am delighted with the work. It is the book for the times. Now, if we can get the book into the hands of the toilers, all will be well."—H. W. Hickman, President Missouri State Wheel. "On returning home from a lecturing tour I find your valuable book, and appreciate it very highly. I spent five hours last night in glancing over it, and find much information that is new to me. I shall make good use of it in such speeches as I make hereafter."—S. B. Alexander, President North Carolina State Alliance. "I think it the book for the people. It gives just the information that is wanted, and if the members of the wheel and alliance will read it and assist in its circulation, it will give an impetus to the reform movement that will assure the success of the objects and intentions of the two orders."—R. T. Love, President Mississippi State Alliance. "The book should be in the hands of every farmer and laboring man in America. It fills a long-felt want and will do great good, not only in educating the masses upon the vital questions of the day, but will be a great benefit to the alliance by placing it in a true light before the farmers of America, showing them their duty in the support and development of it."—*National Economist*. "BROTHER MORGAN:—After a critical examination of your new book, 'History of the Wheel and Alliance and the Impending Revolution,' I find it to be a work of vital importance to every reformer, and one that should be read by every American citizen. The subjects on which it treats are the questions that affect the industries of the nation, and cause the depressed condition of labor. It is a wonderful compilation of facts sustained by the most eminent authorities. It is one of the best educators within the reach of the people and has my hearty approval."—Evan Jones, President Farmers' and Laborers' Union of America. Arrangements are about completed to keep the book on sale at the office of the KANSAS FARMER, so that it may be ordered through us. The price will be published when the book is put in our list.

Horticulture.

Fruit and Shade Trees.

Doubtless many trees will be planted and transplanted this fall, both for shade and fruit. Not a few of those who will engage in this work, imagine that they are killing two birds with one stone by planting fruit trees in front of the home dwelling, on the lawn, or near to the house, where they will serve as shade trees and fruit bearers. This is a practice that should be relegated to the past, and not attempted in this latter part of the nineteenth century. All fruit-bearing trees are short-lived when compared with the more hardy forest and shade trees. Peach trees last but a few years after bearing; cherry and plum trees may live ten or fifteen, while winter apple trees may prolong their healthy, bearing period to twenty or twenty-five years; but this is the longest time that they will continue to live. At that age the tree begins to die and decay, and it is policy to dig them up and put new ones in their places. Fruit trees should, therefore, never be planted for shade trees. Shade trees are becoming valuable when they are fifteen or twenty years of age. Their branches are then spreading out, and their heads reaching heavenward, suggesting a long life of prosperity. Besides this, fruit trees always spoil the looks of a lawn when the fruit begins to drop, keeping it in a constant state of uncleanliness. The proper place for the fruit trees is in the orchard back of the house, and the shade and ornamental trees, such as the spruce, elm, maple, poplars, etc., monopolize the front lawn and yard.—Geo. Wilson, in Farm and Vineyard.

Horticultural Notes.

Many years ago, when oxen for labor were common, we hitched three yoke of oxen to the largest size double Michigan plow, for inverting the sod of an old pasture. It went eleven inches deep, measuring from the sod to the bottom of the furrow, but the new mellow bed of inverted earth measured eighteen inches. This proved an admirable preparation for young trees, the growth of which exceeded any seen elsewhere, and the wood ripened perfectly.

A great many persons have tried spraying orchards the past year with arsenical poisons for the destruction of insects, and all report good success in killing them, says Orchard and Garden. The only trouble reported was in the burning of the foliage, by having the mixture too strong or putting it on too heavy, the latter owing often to the fact that the machinery used was not the best. If the spray is too coarse, or if put on so that the solution will hang in drops on the leaves, the result is that the atmosphere dries up the water and there is too much poison on the edges of the leaves, and harm follows.

Farmers who have hollow trees, walnut, hickory or ash, say twelve inches in diameter, can convert them into ornamental and useful articles. Sawed into two-foot lengths, the rough bark taken off, planed, sand-papered and varnished, they make good umbrella or broom-holders. Or fill with earth and set flowers in them, or plant flower seed. For an umbrella-holder, the log should have in the bottom a round tin-pan, painted, to catch water. The ends of log should be painted as soon as cut, to keep them from cracking open. Sawed six or eight inches long, and covered, they make good footstools. Cut twelve feet long, they are the best thing out to put across lanes or roads where a small stream of water flows—better than tiles, because they do not break. Of course the log should be sound, and the hollow part six inches across.

The total amount of green fruit used by the various canners of California during the season of 1888 is estimated at 35,200 tons, or 70,400,000 pounds. This shows the relative position of the canned goods industry in connection with fruit-growing in California. Compare this with the through shipments by rail of delicious fresh fruits, which during the past season were about 39,000,000 pounds, or somewhat over 1,900 carloads, this being the largest amount of green fruits ever shipped from the State in one season, and we find it is but little over one-half the quantity used by the canners of the State. Taking it for granted that the following estimate, placing the pack at 1,597,000 cases, is cor-

rect, and allowing two dozen cans to a case, we find that it required 38,328,000 cans to hold the fruit. This is an enormous amount of canned goods, and if shipped by rail in cases it would require 5,324 cars and the assistance of one or two hundred locomotives to move it.

In the last report of Prof. B. E. Fernow, Chief of the Forestry Division of the Department of Agriculture, Washington, D. C., we find the following suggestions: Felling trees in early December should have the preference, as there is less sap in the wood and it will season with less care, before the temperature is warm enough to cause fermentation of sap. With proper after-treatment, the time of felling has little influence upon durability. Bark should be removed as soon as the tree is felled. The log should never lie directly on the soil. To prevent checking, coat the ends with some oily substance mixed with brick dust. Thorough seasoning for ordinary purposes is obtained in twelve to eighteen months. Never apply paint or any other coating to green timber, as it hastens decay. Coal tar mixed with oil or turpentine and applied hot is the best preservative coating for fence posts. One barrel of tar costing \$3 to \$4 will coat 300 posts.

Two Crops of Apples in One Year.

The Neodesha (Wilson county) Register says: Uncle Johnny Emerson saw our notice of a second crop of apples, and determined to beat it, brought us in a twig eight inches long cut from an early harvest apple tree, that had on it fifteen apples in different stages of maturity, some of them of a good size, that had grown this year since the first crop was harvested. Next!

The October number of "Insect Life," issued monthly by the Entomological Division of the United States Department of Agriculture, contains a full report on the horn fly, which has been the subject of consideration in the division during the past two years and of special investigation during the past summer. This horn fly pest has been such a torment to the stockmen and dairymen of the Eastern States from New Jersey to Virginia, and has been the subject of so many complaints and inquiries addressed to the Entomological Division that it has been thought advisable to print, as a supplementary issue, a few extra thousand copies of this particular article for the benefit of those interested, in order that the life habits of the insect, adequate remedies and especially means of prevention may be made known as widely as possible.

Separate cattle into different bunches, according to their ages.

Nothing adds so much to a person's appearance as a face thick with hair of even color, and to assure this use only Hall's Hair Renewer.

Ambition on the farm is a good thing, especially if it runs in the direction of having the neatest and cleanest farm, the best crops, and the finest stock.

Wherever sheep feed, new, sweet grasses flourish and weeds are destroyed. For this reason farmers should raise more of them, if for no other. But there are several other and equally good reasons why every farm should have its own flock of these useful animals.

In Vick's Magazine Robert Bunker says: "The future will be a great struggle between the tiller of the soil and noxious insects, with a great advantage on the side of the latter. We shall need more entomologists; every farmer, gardener and florist must get a better knowledge of these insidious enemies that beset him on all sides."

HACKETT, ARKANSAS, August 20, 1887. DR. A. T. SHALLENBERGER, Rochester, Pa.—Dear Sir:—I wish you to send me a bottle of your Antidote for Malaria, which I see advertised in the Methodist Advocate, Chattanooga, Tenn., and which I cannot get here. Fifteen years ago my mother had three day chills, and after trying the doctors' and other medicines without relief, a friend recommended your Antidote; she tried it, and one dose effected a permanent cure. Truly yours, J. S. FIDWYRS, Pastor M. E. Church.

CATARRH CURED. A clergyman, after years of suffering from that loathsome disease Catarrh, and vainly trying every known remedy, at last found a prescription which completely cured and saved him from death. Any sufferer from this dreadful disease sending a self-addressed stamped envelope to Prof. J. A. Lawrence, 88 Warren street, New York, will receive the recipe free of charge.

WELLS, RICHARDSON & CO'S IMPROVED Butter Color. EXCELS IN STRENGTH PURITY BRIGHTNESS

Always gives a bright natural color, never turns rancid. Will not color the Buttermilk. Used by thousands of the best Creameries and Dairies. Do not allow your dealer to convince you that some other kind is just as good. Tell him the BEST is what you want, and you must have Wells, Richardson & Co's Improved BUTTER COLOR. For sale everywhere. Manufacturing, Burlington, Vt.

BABY PORTRAITS.

A Portfolio of beautiful baby pictures from life, printed on fine plate paper by patent photo process, sent free to Mother of any Baby born within a year. Every Mother wants these pictures; send at once. Give Baby's name and age. WELLS, RICHARDSON & CO., BURLINGTON, VT.

TREES Root Grafts—Everything! No larger stock in U. S. No better. No cheaper. Pike Co. Nurseries, Louisiana, Mo.

CECIL'S FRUIT FARM AND NURSERY. C. J. F. CECIL, Prop'r, North Topeka, Kas. Fruit and Ornamental Trees, Vines, Plants and Shrubs. Cherry Trees and Small Fruits a specialty.

379 FRUIT TREES VARIETIES Vines, Plants, etc. Apple, Pear, Peach, Cherry, Plum, Quince, Strawberry, Raspberry, Blackberry, Currants, Grapes, Gooseberries, &c. Send for catalogue J. S. COLLINS, Moorestown, N. J.

STAYMAN'S No. 1 Strawberry. Fine. Produced at the rate of 30,000 quarts per acre. Price \$1 per dozen; \$5 per hundred. JEWEL The earliest and best Black Grape known. Equal to the Delaware in quality. Price \$1 each. Send for testimonials. STAYMAN & BLACK, Leavenworth, Kas.

Hart Pioneer Nurseries

Established 1865. 400 acres. Full line of Nursery Stock. Forest Seedlings for Timber Claims and Apple Trees for Commercial Orchards a specialty. Large Premium for planting forest trees in spring of 1889. Treatise on cost and profit of apple orchard, free on application. Good salesmen wanted.

Douglas County Nursery.

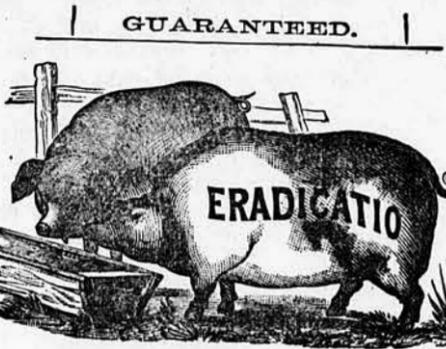
Established in the county in 1869. For the coming fall and spring, we present a full line of nursery stock for the market. We have a large surplus of 1, 2 and 3-year apple trees; 25,000 1-year Concord grape vines—No. 1; 8,000 of other varieties, by the 100 or less. Elvira, Druant, Amber, Catawba, Warden, Niagara, Ives, planted by this 1,000; 750,000 No. 1 hedge plants. Everything at hard time prices! Send us your list and let us give you rates. Write for price and variety list. WM. PLASKET & SON, Lawrence, Kansas.

MILLIONS OF FRUIT TREES, SHADE TREES, Small Fruits, Vines, Ornamental Trees, Etc.

Ten Million Forest Tree Seedlings. One Million Hedge Plants. D. W. COZAD, Box 25, LA CYGNE, LINN CO., KANSAS.

THE SYRACUSE NURSERIES

OLD AND RELIABLE. LARGEST - MOST COMPLETE Assortment of Nursery Stock in America. In BUDDED APPLES and STANDARD PEARS they acknowledge no competition—quality considered. Nurserymen and Dealers will consult their own interests by getting prices on this SUPERB STOCK before buying. Special inducements to buyers in large quantities. SMITHS, POWELL & LAMB, Syracuse, N. Y.



GUARANTEED. ERADICATIO (TRADE MARK) EVE P. O. VERNON Co., Mo., September 30, 1889.—The Bragdon Chemical Co., Fort Scott, Kas.—Dear Sirs: After losing about eighty hogs by Cholera I bought of you, early in August, a few cans of two pounds each, of your Hcg Cholera Specific, and began to use as directed. Some of my hogs and small pigs were too far gone to save and I did not expect to save them. On the 5th of August I bought one case of twenty-four pounds, and from that time have used your medicine with great success. In a short time the disease was checked, and my hogs began to thrive, and I have had no trouble since. I believe your Specific has saved my hogs, and I recommend it particularly as a preventive of Hog Cholera, as well as a cure, if given as soon as the disease makes its appearance. I shall always keep it on hand, as I think it the best and only medicine yet found to cure Hog Cholera. Yours truly, A. J. EMERSON.

ATTENTION FARMERS!

And all who are interested in reform. The Home Nursery Co. AND FRUIT GROWERS' EXCHANGE. Incorporated under the laws of the state of Illinois. Capital, \$25,000. NORMAL, - - ILLINOIS. Takes the lead in offering to the general public a system of membership by which the member is entitled to purchase nursery stock at wholesale, direct from the grower, delivered subject to examination and approval before payment is made. This system is fully endorsed by the State of Illinois, and is used by many prominent citizens of this and other States. Every member receives a certificate, for a nominal sum, entitling him to the benefits of the Exchange and a copy of the Home Journal for two years. Also a complete price list, order blanks, etc. Correspondence solicited. Address W. M. SCHURMAN, Manager, Normal, Ill., or J. M. HOLFERTY, Manager Western Dept., Kansas City, Kas.

Mount Hope Nurseries

For the Fall of 1889 and Spring of 1890, we call attention to our IMMENSE STOCK of Nursery Stock in all its branches, especially of Cherry and Pear Trees, Standard and Dwarf. This is native stock and is worth twice that of Eastern grown. Wholesale trade a specialty. Catalogue in August. Agents wanted. Correspondence solicited. A. C. GRIEBA & BRO., Lawrence, Kas.

ON 30 DAYS' TRIAL.

THIS NEW ELASTIC TRUSS has a Pad different from all others, is cup shape, with self-adjusting ball in center, adapts itself to all positions of the body, while the ball fits the cup, presses back the intestines just as a person does with the finger. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Send for mail Circulars free. HIGGINTON TRUSS CO., Chicago, Ill.

Ely's Cream Balm THE CURE FOR CATARRH HAY-FEVER FEVER COLD IN HEAD 50 Cts. ELY BROTHERS, 66 Warren St., New York.

HOSPITAL REMEDIES

THE Favorite Prescriptions of the Brightest Medical Minds in the world, as used by them in the Hospitals of London, Paris, Berlin and Vienna. ONE MEDICINE FOR ONE DISEASE. No. 1—Cures Catarrh, Hay Fever, Rose Cold, Catarrhal Deafness. No. 2—Coughs, Colds, Bronchitis, Asthma, Consumption. A Peerless Remedy. No. 3—Rheumatism, Gout. No. 4—Liver & Kidneys, Dyspepsia, Indigestion, Constipation, Bright's Disease. No. 5—Fever and Ague, Dumb Ague, Malaria, Neuralgia. No. 6—Female Weakness, Irregularities, Whites, A Golden Remedy. No. 7—A Perfect Tonic, which gives Health, Form and Fullness, Clear Complexion, Good Blood and lots of it. No. 8—Nervous Debility, Loss of Power, Impotence, an incomparable remedy. RELIABLE. Every bottle guaranteed to cure its special disease if DURABLE and to give permanent relief 7—WAYS. AGENTS WANTED. Descriptive Circulars sent free on application. HOSPITAL REMEDY COMPANY, Toronto, Canada.

Bragdon's Specific FOR THE PREVENTION AND CURE OF HOG CHOLERA.

It is no longer a debatable question as to whether HOG CHOLERA can be prevented and cured. It has been proven over and over again that BRAGDON'S SPECIFIC for the prevention and cure of the Swine Plague or Hog Cholera will cure and prevent this heretofore uncurable and devastating disease, when used in strict accordance with our directions. Real testimonials, written by honorable and intelligent men which will appear in this paper from time to time. THE BRAGDON CHEMICAL CO., FORT SCOTT, KANSAS.

The Poultry Yard.

POULTRY EXHIBITIONS.

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

The Evils of Overcrowding

the fowl-houses, and of attempting to carry along hundreds of domestic birds within the limited area that is too frequently allotted for their convenience, we have often alluded to. The result of this method is more sickness and mortality among the flocks kept by many breeders than is generally admitted or understood to be the fact.

We have recently had our attention called to two or three establishments where several hundred breeding birds are thus kept for common marketing purposes, the owners of which have complained to us that notwithstanding all their care and attention to the generally conceded needs of their flocks, they have met with numerous disasters, and have been sadly disappointed at finding, though they massed together two or three hundred good, healthy, mature fowls, early last spring, and had fed them judiciously, kept them clean and tidy, and allowed them their liberty through the day-time, that they got but few eggs from them in comparison to the number of layers, and had been occupied latterly almost continually in attending to sick or dying fowls amongst them.

This is not surprising to us, inasmuch as we were long ago satisfied how impracticable was this plan in attempting to breed fowls. Why it is that the congregating together of large numbers of birds in their roosting quarters will surely cause sickness to break out amongst them, we can not tell, except upon generally accepted principles. It is nevertheless the fact, that no matter how thrifty the chickens may be when gathered upon your premises, and placed in their future breeding quarters, if you get too many in a mass for the size of your buildings, they will shortly get ill, the pullets will cease to lay, the old fowls will grow dumpy and sluggish, lice will generate inconceivably upon their bodies and all over the interior of the houses, and misery, debility and general destruction will follow as surely as this error in their management is committed.

To preserve young breeding stock in good order, therefore, you must give them room to move about in. They must have ample roosting places where they will not crowd each other at night, especially in hot weather. They must be apportioned in numbers during the day-time, so that they will not be hived and huddled together against their will. And at all times, by day or by night, they must have breathing space, fresh air, and area for exercise, or they cannot thrive and grow and lay eggs for you.

In the instances we have referred to over a hundred fowls were kept in one small yard; a dozen cocks and about a hundred hens together. Twenty-five birds would be ample as to numbers for the space thus appropriated. But the anxious proprietor wanted to get "plenty of eggs" when the fowls were naturally in their best laying condition, and upon his theory, "the more hens the more eggs." Yet it turned out, in a single month's time in his experience, the more fowls thus huddled together the less eggs he obtained, and the more sickness, vermin and death occurred amongst them!

Never crowd your birds. You cannot gain anything by this process. They must be kept from coming into bodily contact with each other. And if you would have them healthy, vigorous and profitable as layers, give them room to circulate and exercise in. Furnish them with good, sound food, clear water, and ample ventilation of their houses. And never forget that it is the poorest of all poor economy to undertake to get satisfactory returns from hundreds of fowls that are stived up in the space that only a few scores can live and breathe and move about comfortably in.—Poultry World.

Poultry Notes by a Correspondent.

Coarse sand stored in some unused shed or stall in the barn or in any place that is protected from dampness, will always come into use. Scatter it over the floor of the hen-house and the dropping-board,

and saves much hard work of cleaning up their quarters.

The ground about your poultry runs should be plowed about three times a year. This is a good precaution against their becoming troubled with gapes. Nothing carries off chicks as rapidly as gapes, and it should be remembered and avoided by every farmer.

Grain that is musty should never be fed to poultry. There is no economy in feeding inferior grain. Get the best and let that be dry and free from dampness or mustiness. Too many breeders ignore this matter, thinking that any grain or screenings is good enough for fowls. It is a mistake, and they find it out when too late.

Young hens are unquestionably the best to keep for egg production. An early-bred pullet will lay when the old stock are taking a vacation, and the time when the latter are resting is just the time when eggs are so much sought after and good prices obtained. Hens will continue laying well the second season, but after that pay no return for their keeping and the market is the proper place for them. Young hens always command higher prices in market, but old hens are the kind to sell, as they occupy space and eat food that young stock should have.

Eggs packed in salt will keep six months and longer. They should be packed either in a stone crock or barrel, and a soap-box sometimes answers the purpose very well. Put a layer of salt in the bottom of the receptacle about two inches deep, then place the eggs in carefully with the small end down, not allowing them to touch, then another layer of salt to cover the eggs, placed in position, then another layer of eggs, and so continue until the box is full; cover them up well with salt and store in a cool place. This is one of the best ways of keeping eggs. If you have never tried it you should do so.

One of the largest colonies of poultry-raisers are to be found in Hammonton, New Jersey. It has been reported that upwards of 50,000 chicks are marketed every month from this town; the majority of them go to the New York and Philadelphia markets, and are incubator-hatched and reared under a brooder. It is an uncommon sight to see 1,000 chicks come out of their shells from one to three days after or before the three weeks time for hatching. This is really a wonderful sight and worth a long journey to witness. The incubator is the only way to meet the market demands for poultry at the present time, being reliable and quick in its operations, and with a little practice any one can operate them successfully.



INFANTILE
 Skin & Scalp
 DISEASES
 Cured by
CUTICURA
 Remedies.

FOR CLEANSING, PURIFYING AND beautifying the skin of children and infants and curing torturing, disfiguring, itching, scaly and pimply diseases of the skin, scalp and blood, with loss of hair, from infancy to old age, the CUTICURA REMEDIES are infallible.

CUTICURA, the great Skin Cure, and CUTICURA SOAP, an exquisite Skin Beautifier, externally, and CUTICURA RESOLVENT, the new Blood Purifier, internally, cure every form of skin and blood diseases, from pimples to scrofula.
 Sold everywhere. Price, CUTICURA, 50 cents; SOAP, 25 cents; RESOLVENT, \$1. Prepared by the POTTER DRUG AND CHEMICAL CO., BOSTON, MASS.
 Send for "How to Cure Skin Diseases."

Baby's Skin and Scalp preserved and beautified by CUTICURA SOAP.

KIDNEY PAINS, Backache and Weakness cured by CUTICURA ANTI-PAIN PLASTER, an instantaneous pain-subduing plaster. 25 cts.

CATARRH
HAY FEVER
CATARRHAL
DEAFNESS

A NEW TREATMENT.
 Sufferers are not generally aware that these diseases are contagious, or that they are due to the presence of living parasites in the living membrane of the nose and eustachian tubes. Microscopic research, however, has proved this to be a fact, and the result of this discovery is that a simple remedy has been discovered which permanently cures the most aggravated cases of these distressing diseases by a few simple applications made (two weeks apart) by the patient at home. A pamphlet explaining this new treatment is sent free by A. H. DIXON & SON, 337 and 339 West King Street, Toronto, Canada.

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 PAY RETAIL PRICES
 WHEN YOU CAN
BUY AT WHOLESALE

WHATEVER YOU
EAT, WEAR OR USE.

WE HAVE NO AGENTS.

Write for full Catalogue Sent FREE.

H. R. EAGLE & CO.,
 Farmers' Wholesale Supply House,
 68 WABASH AVE., CHICAGO.

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 I have used Dr. Seth Arnold's Cough Killer, and it is the only medicine which relieves my cough.—Peter Edl, Gloversville, N. Y. Price 25c. 50c. and \$1 per bottle.
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Suffering from the effects of youthful errors, early decay, wasting weakness, lost manhood, etc., I will send a valuable treatise (sealed) containing full particulars for home cure, FREE of charge. A splendid medical work; should be read by every man who is nervous and debilitated. Address Prof. F. C. FOWLER, Moodus, Conn.

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The Veterinarian.

[This department is conducted by Geo. C. Fritchard, 615 Quincy street, Topeka, an educated practitioner.]

Deroy Danielson, Goodland, Kas.—Your mule is certainly suffering from some irregularity of the mouth. Either the incisors (front teeth) are too long or the molars are uneven—some longer than others, with sharp projections, that interferes with mastication. Have him examined by an expert.

Geo. Cook.—Make a dependent opening, good size, on both sides of the withers, at the lowest part of the swelling, then poultice with linseed meal till the enlargement is reduced, and follow with a good smart cantharidean blister, mixed in the proportion of one part of the drug to eight of lard or vaslene. It may be necessary to blister two or three times.

J. W. Baldrige, Mound City.—Examine your cow's teeth carefully on the side of the swelling. If there are no irregularities of teeth, we would strongly suspect "big-jaw," properly called osteo sarcoma. This disease is practically incurable, as it will attack any of the bones of the body. The long bones of the limbs, as well as the bones of the face, are frequently affected. When the affection has reached the extreme stages, and wasting has commenced, with glandular enlargement, the flesh is no longer fit for human food.

A. F. Sylvester.—Your colt had influenza at first, followed with inflammation of the lungs. The swelling of the limbs is due to debility and irregular circulation of the blood. Treatment should be to sustain the strength, with such stimulants as nitrous ether, milk, whisky, etc., and give small doses of nitrate of potash, ten to twelve drachms in twenty-four hours. Bandage the limbs with flannel bandages; use cloths wrung out of hot water to the sides, or mustard rubbed into the hair over the surface of the lungs. Keep the bowels loose with loosening diet, and keep the colt in a clean place, with plenty of good, pure air.

C. Keeler.—Your hogs have bronchitis. Those cases terminating fatally, with difficult breathing, had pneumonia (inflammation of the lungs). Would advise separating the well from the diseased. Upon the first indication of a cough, place the diseased ones in a dry, comfortable place, with plenty of good pure water always at their disposal, and give the following, as soon as the cough is noticed: Solution of acetate of ammonia, 8 ounces; tincture of aconite, 1/2 drachm; water, 1 pint. Mix, and make eight doses; give every four hours or three times a day for two or three days. This being the amount needed for one, you can regulate the quantity of medicine by the number of hogs, in the same proportion.

L. H. Bollinger, Fort Scott.—Your colt is troubled with chronic eczema, and requires very thorough treatment. First, prepare for a ball, by a loosening diet for two or three days, then give a ball, as follows: powdered aloes, 8 drachms; powdered resin, 3 drachms; ginger, 2 drachms. Make into one ball and administer. Wait until you get a good smart action from the bowels (if the first dose don't act, repeat the dose after forty-eight hours); then, if the hair is long clip her all over, and wash thoroughly with soft-soap and rainwater, using a stiff broom to scrub her with. Rub dry and apply your carbolic acid wash, as before, to affected parts. Feed soft feed entirely, and after a week commence with Fowler's solution arsenic. At first give only half-ounce doses, increasing after two or three days to one ounce twice a day in the feed, and continue for six or eight weeks.

W. S. Randal, Clay Center.—Your pigs are suffering with a peculiar nervous disease known as hydro-rachitis. The pathology of this disease is somewhat obscure. The post mortem appearances indicate the disease to be confined principally to the nervous system and digestive organs. The spinal cord is usually more vascular than in health, and there is an increase in the quantity, as well as consistence of the fluid by which it is surrounded. The ventricles of the brain also contain similar excesses, and softening of the cord is not uncommon. The treatment is very unsatisfactory if of long standing. At the first indication of the disease a good smart cathartic should be administered, to be followed by nerve tonics. For the cathartic, magnesia sulphate in doses of four to six ounces. After the bowels have acted, follow with powdered nux vomica in doses of ten to twenty grains twice a day in the feed.

Stolen Horse and Buggy.

From my stable, Wednesday, October 23, 1889, end-spring top buggy, red running-gear, trimming on back of seat is worn, showing white cord, check-rein is spliced where it hooks onto the hook, harness used about four years. The horse is 10 years old, weighs about 1,000 pounds, high-headed, high in the withers, rather leggy, dark bay; new shoes in front, smooth shod behind; left hind foot white, scar under left front elbow, branded S on side. The man was 35 years old, weighs 150 pounds; dark hair and dark, stubby mustache; dark complexion, clothes dark, well dressed. Gave the name of W. S. Childs, alias H. C. Willis. A liberal reward will be paid for arrest of thief and return of property.

JOHN M. PETERSON, Topeka, Kas.

Boytton Furnaces at D. A. Mulvane & Co.'s, Topeka.

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 November 5, 1889 [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. Gas-burner—James Baker, St. Louis. Appld for teaching penmanship—James Delay, Kansas City. Wagon-brake—Wilcox & Williams, Smithville. Desk—Sylvester Grogg, St. Joseph. Flow—John Clay, Sedalia. Hat guard—Frank F. Nife, St. Louis.

KANSAS. Car coupling—John Bender, Marion. Windmill—Frank L. Butler, Concordia. Device for administering anaesthetics—Mark B. Smith, McPherson. Wash-fastener—Isaac T. Price, Holton. Graze-cleaning machine—Joab B. Fisher, Beloit. Bale tie machine—Albert Henley, Lawrence. List of patents granted during week ending October 29:

MISSOURI. Beller—Jacob S. Williams, St. Louis. Tag—Eliza Anderson, Kansas City. Construction of retaining walls—William H. Harrelson, Kansas City. Machine for washing ores—Henry Wunder, St. Louis. Brick machine—Lewis B. Kennedy, St. Louis. Fruit-gatherer—James M. Davenport, Centerville. Seed-drill and fertilizer-distributor—Jonathan C. Pedon, Bose.

KANSAS. Portable turn-table—Thomas Slevin, St. Louis. Device for counting stamps—Crockett & Hatcher, Americus. Car coupling—William S. Bunce, Sheldon. Mechanical repository—Joseph J. Fowler, Washington. Hot air furnace—Francis M. Campbell, St. Louis. Anti induction system—John O. Stockwell, Burlington.

KANSAS. Dish-washing machine—Robert C. Cornett, St. John. Name fastener—Alfred Fellows, Lansing. Kitchen cabinet—John B. Bell, Kansas City. Buckle—Michael H. Frazier, near Fredonia. Road-grader—Henry J. Chambers, Beatrice.

Situations for Young Men.

The Topeka Railway and Commercial Telegraph Institute has just expended over three hundred dollars in new instruments and electrical apparatus, and have now the finest, most complete and practical institution of the kind in the world. They are backed by men financially able to fulfill any contract they may enter into, and they obtain situations for all who finish course with them. Their Superintendent is a railroad man of sixteen years' practical and actual experience, having had entire charge of one division of Santa Fe road for two years, and is the most eminently qualified man that could be found to fill the position. Any Young Man who wants to make his way in the world should investigate and see what they are worth to him. Three to six months completes the profession and first month's wages nearly cover cost of tuition. Their address is 618 Kansas Ave., Topeka. See advertisement in another column.

The Vandalia and Pennsylvania Line

Commencing October 16th, will run daily on their 8:10 a. m. train, Vestibuled Living Cars, serving all meals (including breakfast on leaving St. Louis), St. Louis to New York. Positively the only line running a regular dining car from St. Louis.

THE MARKETS.

(NOVEMBER 11.)

Table with columns for Market (GRAIN, LARD, SPOCK), Item (Wheat, Corn, Beef, Fat Hogs, Sheep, Horses, Mules), and Price. Includes sub-sections for NEW YORK and ST. LOUIS.

Topeka Produce Markets.

Corrected weekly by W. G. Frazier, wholesale produce commission merchant at 213 West Fifth street, Topeka, Kas. Prices subject to commission:

- Choice Dairy Butter—16@18c # b. Eggs—21@25c # doz. Spring Chickens—\$2.25@2.50 # doz. Hens—\$2.50 # doz. Turkeys—7c # lb live weight. Prairie Chickens—\$3.50 # doz. Quails—\$2.00 # doz. Mallard Ducks—\$2.00@2.25 # doz. Squirrels—\$1.00 # doz.

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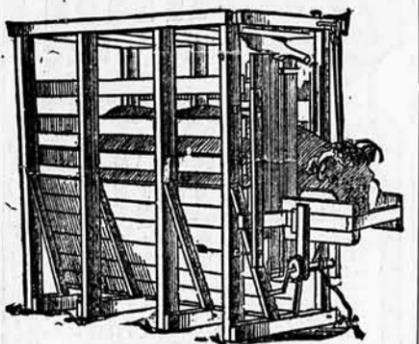
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Breeders and shippers of Poland-China swine, Short-horn cattle and Fancy Poultry. Please call and examine stock or write for what you want. Ottawa Chief No. 2464. (Mention Kansas Farmer.) Farm 3/4 miles southeast of Ottawa, Kansas.

Arkansas Valley Herd. O. MOUNTYRE & BRO., Halstead, Harvey Co., Kansas,

Breeders of Thoroughbred POLAND-CHINAS. Give or Take and other noted strains. Pigs, both sexes, for sale.

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Twenty five head of spring boars and thirty sows, if taken before January 1, 1899, \$10 to \$15 apiece; thirty choice fall pigs, \$10 per pair. All are eligible to record and are worth more money, but to meet the close times I make these prices.

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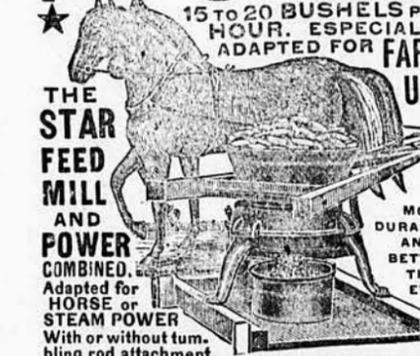
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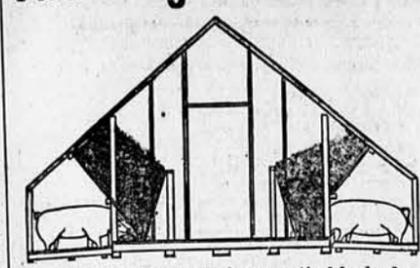
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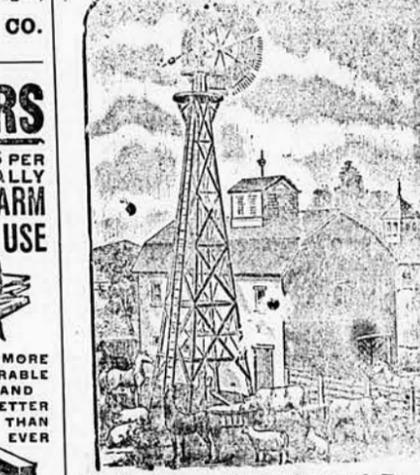
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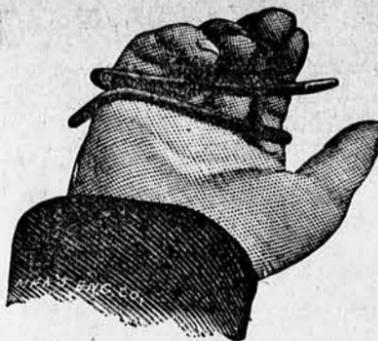
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