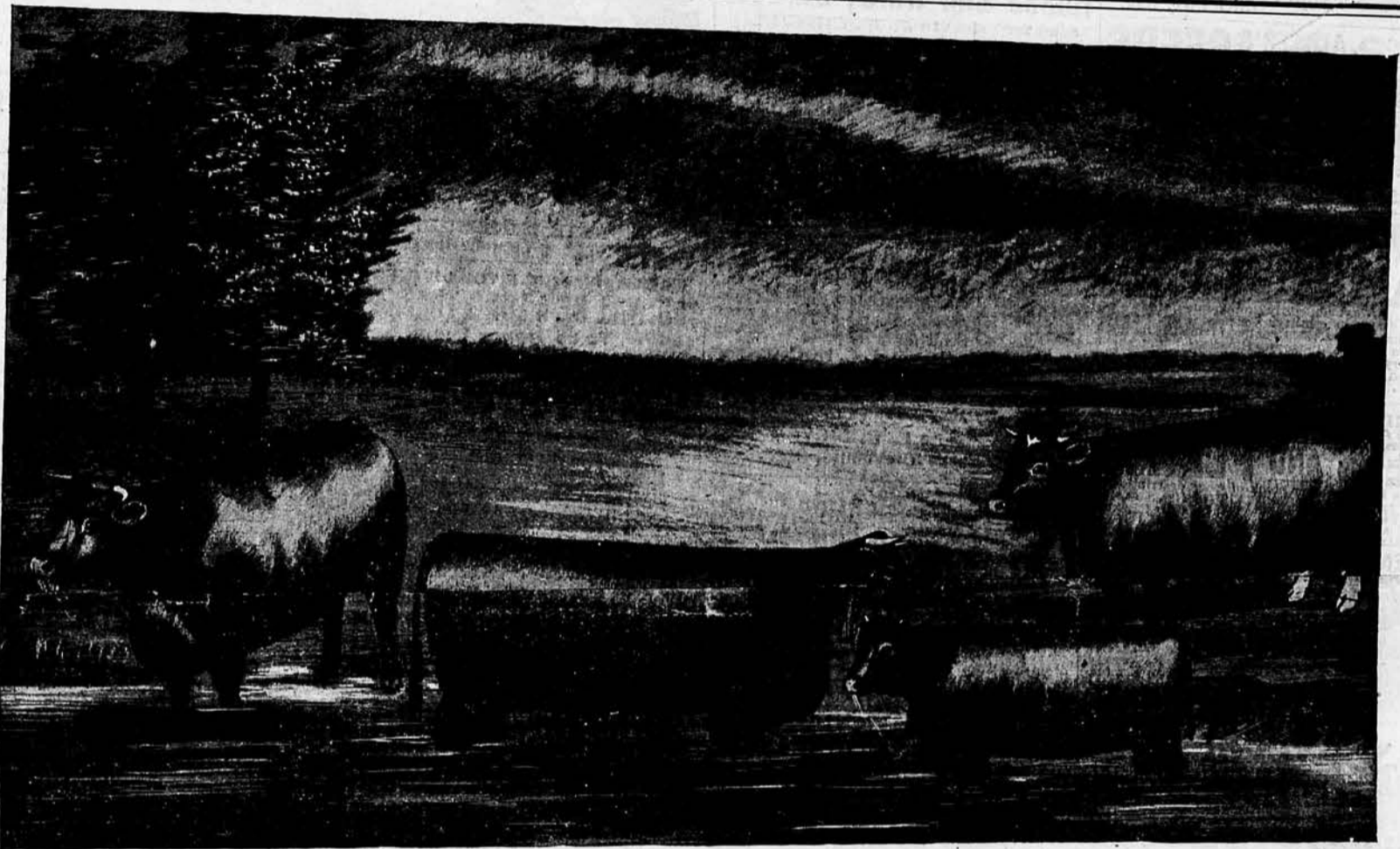


KANSAS FARMER

ESTABLISHED 1863.
VOL. XXXI, No. 13.

TOPEKA, KANSAS, WEDNESDAY, MARCH 29, 1893.

SIXTEEN TO TWENTY
PAGES—\$1.00 A YEAR.



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FOR FATTER SHEEP AND MORE WOOL. BENEFITS THE FLOCK. ERADICATES INSECTS AND DISEASE.
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HOLD THAT HORSE No matter how "hard-bitted" the animal with the "Success" Bit it is under absolute control of the driver. A humane bit having but one single steel bar. Instantly changed to plain straight bar bit by adjusting reins. Guaranteed. X C or Japan, \$1.00. Nickel Plate, \$1.50. Postage paid. **Wm. Van Arsdale, Haeine, Wis.**

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KANSAS FARMER

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TOPEKA, KANSAS, WEDNESDAY, MARCH 29, 1893.

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Publishers' Paragraphs.

The Frank B. Barkley M'fg. Co., Garden City Block, Chicago, Ill., who are large advertisers and familiarly known to the readers of the agricultural press, have arranged for a fine exhibit at the World's Fair. Their special features will be their \$5.50 harness and \$55 buggy. When visiting the World's Fair it would be to the interest of our readers to investigate the merits of these goods.

The condition of the hay market as represented by M. M. Freeman & Co., hay commission, 14-16 Pacific avenue, Chicago, is decidedly favorable. The supply is not large and the demand is quite active. If any of our readers have hay to sell it would be to their interest to communicate with this concern. Our Chicago manager is familiar with their methods of doing business and states they are all right.

The Memorial Association of the District of Columbia has published an elegant series of historical sketches of interesting structures in the city of Washington. The charm of these sketches is their simplicity and directness. They are finely illustrated and they convey in few words and attractive form the interesting points of Washington history. The publication is called "Historic Washington" and is sold at 10 cents.

Adam's Woven Wire Fencing, manufactured by W. J. Adam, Joliet, Ill., is proving a great success. It has been on the market for some time, and wherever an order has been placed a second one is sure to follow. Our Chicago manager reports a visit to his establishment and states the fencing he is putting out is of very excellent quality. Any of our readers desiring anything in that line would do well to communicate with Mr. Adam and get his explanatory circular, which he will mail free.

In a recent talk with a New York Post reporter, Herr Anton Seidl, the great orchestra leader of New York, who is thoroughly familiar with the Bayreuth festivals, said: "I have been to Chicago to see a model of the 'MacKaye Spectatorium,' a mammoth enterprise which will inaugurate a new era in the history and method of stage spectacle. The stage is three times as large as the immense stage at Bayreuth

and the building would cover five of New York blocks. The Columbian Celebration Company makes its offer of unlimited means on the condition that this must be the grandest and most interesting stage spectacle ever witnessed, and this condition will be completely fulfilled. Everything will be equipped with a realism surpassing anything ever seen. Clouds, sunsets, storms and other phenomena of nature will transcend anything ever witnessed at Bayreuth." Mr. Seidl expressed a hope and belief that it would ultimately lead to a grand American Bayreuth festival.

Attention is called to the farmer's friend "Steel Beauty" corn-planter advertised in this number. Its build is so attractive, and its working parts so simple and complete, that the manufacturers tell us they are taxed to the utmost to supply the demand. With one set of plates, and without changing parts, it drills, or plants in hills, using either wire or hand drop. It is also adjustable from three feet, two inches, to three feet, ten inches in width. It was introduced last year with a sale of over 5,000. The sale this year with the 1893 improvements, will be much larger. One hundred a day, ten an hour, one every six minutes, is now being manufactured.

While writing with all the scientific knowledge of a great astronomer, Camille Flammarion in his marvellous story, "Omega: The End of the World," which appears in the April number of *The Cosmopolitan* magazine, keeps the reader at the highest point of excitement by his vivid description of the alarm and despair excited by the approach of a comet whose collision with the earth has been declared by astronomers inevitable. The description begins at a time when the business of the world has been suspended, and at a great mass-meeting held in the Institute of France we hear the discussion of scientists as to the possibility of a second deluge, the drying up of all the surface water of the globe, or the total destruction of human life by cold, together with all the possible phases of death paralleled by the history of the moon. For scientific statement and sensational effect this characteristic production of French genius is unique, and the reader who reads this marvellous story—and if he begins it he will certainly finish it—will have assimilated without effort, a compact store of scientific knowledge. In this way apart from its absorbing interest, this remarkable piece of fiction will have a distinct scientific value.

Gossip About Stock.

Time and expense may be saved and success attained by using the Perfect Impregnator on your mares that won't "catch." See "ad" elsewhere in this paper.

J. H. Paul, of Platteville, Wis., is sending out an illustrated catalogue of his pure-bred poultry and is said to have a very nice lot of Plymouth Rocks, Wyandottes and Brahmans. Write him if you are in need of anything in that line.

If any of our readers are looking for Mammoth Bronze turkeys it would be to their interest to communicate with S. J. B. Dunbar, of Elkhorn, Wis. He is now selling Bronze turkey eggs and will supply you with full information concerning his poultry upon application.

Dr. Bye's Combination Oil cures cancer. Read his advertisement.

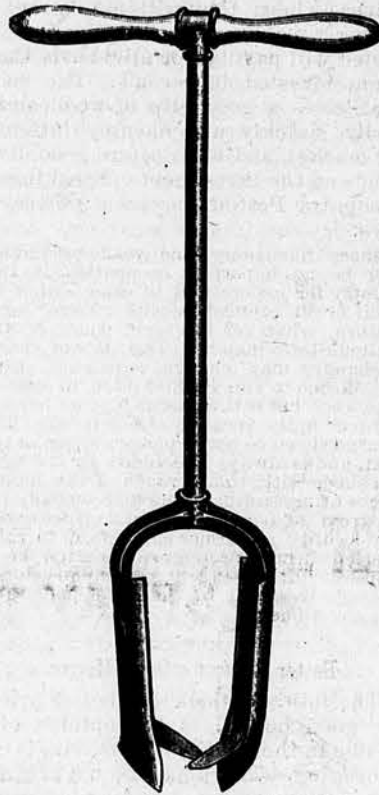
Money got through a lie has a moth on the inside and rust on the outside.—N. Y. Witness.

We Sell Live Stock.

Our cash sales for 1892 were \$1,842,177.72, total business exceeded two and one-half million dollars. Established since 1880. Market reports free and consignments solicited from stockmen, by OFFUT, ELMORE & COOPER, Room 203 and 204 Exchange Building, Kansas City Stock Yards.

An Improved Post-Hole Auger.

The illustration on this page shows the Iwan improved post-hole auger, an implement that has met with a hearty reception by those who have given it a trial. The manufacturers say "that it is the only auger



that has met with universal satisfaction under all conditions of soil and climate, that it will bore a hole in one-half the time required by any other auger or digger in use, and that money will be refunded if it does not prove satisfactory." As a sample of testimonials they have received we quote from a letter by Mr. W. T. Sutherland, of Stillwell, Illinois, as follows: "Your post-hole auger is simply immense, and discounts anything in the way of augers I have ever used. The condition of the ground makes no difference. It simply gets there every time." The manufacturers, Iwan Bros., of Streator, Illinois, will exhibit a full line of their diggers at the World's Fair, and may be found in the southeast corner of the agricultural department. They make a variety of drain tools, etc., and send catalogue on application. Address as above.

April Notes.

Most of the garden can be made now. Plan to keep all of the ground occupied. Make the change from dry to green food gradually. There is no economy in attempting to work the soil wet. Be careful that the sheep are kept clean until after shearing. Cover the early planting shallow and the late planting deeper. Be sure that the soil is in a good tilth before planting the seed. Pigs wintered in a good condition ought to make rapid gains now. A diversity of crops enables the farmer to do much of his own work. It is easier to work the soil into a good tilth before than after planting. Even with good pasturage fattening stock need all the grain they will eat. More care can be given by drill-planting, but the work of cultivating is increased. Before the sheep are turned into the pastures be sure that they are properly tagged. It is usually best to give shallow cultivation both in the orchard and among the small fruits. With nearly all cultivated crops shallow

cultivation, keeping the soil in a good tilth, will secure the best growth at the least cost.

After grass makes sufficient growth to furnish a full feed stock can be made gain very rapidly.

A sharp steel rake is one of the very best implements with which to commence the cultivation in the garden.

Cabbage will stand more fresh, coarse manure than almost any other vegetable, and needs more frequent cultivation.

In nearly all cases it is best to let the much remain on the strawberries until after the plants are done fruiting.

Plant or sow some crop that if needed can be used during the summer to keep the stock thrifty should the pasture fail.

There is no economy in working so hard that there is no time or inclination to properly plan what is necessary to be done.

Under average conditions the next two months are the most important of the year for securing the best gain at the lowest cost.

Keeping up with the work now is an important item in getting done all that is needed to be done in good season and in the right manner.

Do not plant a larger acreage than can be given thorough cultivation from the start. It is the early cultivation that is the most important and it should be good.

Weeds are easiest destroyed when small, hence the cultivation should be commenced before they secure a start. Use the harrow first and then the spring tooth or disc-cultivator.

Give the work teams a little especial attention now. It is very important to keep them in a good condition and a little extra feed and care will often aid materially in doing this.

Our First-Page Illustration

Is from the herd of Short-horn cattle belonging to Isaac Johnson, of Lincoln, Nebraska, all of which are to be sold at public sale at Lincoln, May 25, 1893. The central figure is Lady Warlaby 8th by Imp. Lord Haddo 93462, out of the great show cow Lady Warlaby 2d, by Imp. Sir John 33891. To the left is her calf, Warlaby Pet, and at her right is another of her calves, Lady Warlaby 9th; and still further to the right is Gem of Hickory Park 4th, full sister of Gem of Hickory Park 3d, the sweepstakes winner at the leading American shows of 1891 and 1892. Gem of Hickory Park 4th took second prize at Minnesota State fair last year as a calf. She belongs to a prize-winning family and in most points she is hard to beat.

What Causes Gray Hair.

"Gray hair is so common now," said a barber the other day, "that one wonders what it comes from. Young men have it in profusion, and young women are very proud when they have a coiffure in which gray has a prominent part. I attribute the prevalence of gray hair to frequent cutting and soap. The doctors speak of inherent tendencies, and old women gabble of early piety, but soap and the barber do more toward taking the color and strength out of the hair than anything else.

"The singeing of hair is done to prevent the oils from exuding from the ends of clipped hairs, and singeing is in this regard better. But ammonia-loaded soaps are the worst factors. Many persons use ammonia when washing their head, and it enters into all shampoo mixtures. It is also an ingredient of most soaps. It dries up the scalp and robs the hair of all its moisture. That is where the most of the gray hair of to-day comes from."—*The Million*.

That cure of Geo. W. Turner, of Galaway, N. Y., of scrofula, by Hood's Sarsaparilla, was one of the most remarkable on record,

Agricultural Matters.

WASTE ON THE FARM.

Synopsis of President Fairchild's remarks before Douglas County Institute in 1891.

He began by saying that though not a farmer himself, he had always lived with farmers, and as a "looker-on" had noticed how seldom the maxim—"A penny saved is worth two gained, and a penny well spent is best"—is thoroughly applied. This is an age of saving in most of the industries. Every great enterprise in manufacture—sawmill, factory, railroad, steamship—is making its profits from saving the little wastes. The great sawmills save even the slabs and sawdust. But farmers, giving the most striking examples of necessary economy, are still the greatest wasters in the line of production. The spigots of waste are found in careless seeding, by which only a portion of the field is occupied, though all must be plowed, cultivated, and harvested at a cost as great as if the full stand were secured; in the slack culture by which weeds are left to suck fertility and moisture from the struggling corn stalk, and to fill the land with millions of seeds to be fought in future years; in thriftless breeding, by which a sorry sire of scrubby stock is used for cheapness, although every farmer knows that like produces like, and generations of blocky beef-cattle insure a continuance of such stock, doubling the value of his increase; in shiftless feeding, in neglected feed lot with poorest facilities for handling stock or feed; in thoughtless marketing, with careless loss of multitudes of little products that might sell for a goodly sum in the year if means were provided for sending from a whole neighborhood; in decay attacking stored crops, machines, and buildings, discovered too late for saving; in broken tools and dull tools and lost tools, forgotten till needed, and hindering a day's work till repairs or recovery or purchase can make ready. All these spigots of waste, too familiar to be dwelt upon, were illustrated by a story of a farmer who drew his load of hay twelve miles to market upon a wagon whose neglected tires came off and left the fellos to crush, and showed by his handling of the load that "gumption" was wanting, when for a day and night himself and son were kept at work in marketing a \$3 load of hay, with three broken wheels to repair and they borrowed wheels to return to add to the wrong side of his bargain.

But still greater waste is evident in lack of contrivance to save the multitude of steps that make up chores by having convenient arrangement of house, well, and barn, sheds, lanes and fields; to save friction in machines and tools, harness, wagons, gates, doors, and windows; to save health in protection from wet, cold, and wind, hunger, thirst, and exposure; to save temper by easing the burdens of the day through foresight; to save the scraps of knowledge that count so much in the practical wisdom of daily life; to save the odds and ends of temptation that make for good or ill the character of the home.

A still greater waste is found in lack of consistent planning. When the plans of a business man are as indefinite as those of the average farmer, he fails before he is recognized as a business man. The factory that lacks consistent plans lies idle. So in a measure does the farm, unless there is constant, careful planning—planning for the daily routine which will accomplish most in the least time; for the season's work, so that every day, be it wet, cold, windy, or fair, may have its appropriate tasks; for such a rotation of crops as to gain a full use of the soil, sunshine, showers, and manures that make our mine of wealth; for adjustment of stock to crops, so that every straw, as well as every bushel of grain, be turned into the most profitable form of produce for market; for safe storage of produce till ready for market; for development of skill in a business where every year's experience ought to count for surer results. Instead of being most subject to change of all producers, the farmer should be the most careful of planners for a life devoted to his own line of business. Instead of flying

from wheat to flax, and from flax to corn; from pigs to sheep, and from beef to dairy cattle, he should save the waste of capital and skill in careful study of his own situation and careful experiment in changes to suit his condition. The waste from our farms in shifting crops and stock at a mere popular whim cannot be estimated. A famous New York farmer gave as the maxim of his success in sheep, "Buy when your neighbors sell, and sell when they buy."

Finally, the chief waste of life on a farm is in false purposes. The farm should be looked upon, not as a mere machine for speculation, not as a mere means of living, but as the home of generations, where children and children's children may find the truest development of life. The home acres should be deeper, rather than broader. "More land, more corn, more hogs," leads nowhere but to greater hoggishness. Better land, better crops, better stock, insure better men and women, better homes with each generation. Wealth is good for use, and every farm of true progress gives better use of wealth for the larger life of the farm home. Here, in the farm home, the best part of the world's workers in every calling must grow to manhood and womanhood, and here the true beginning of an eternity of progress must be found. The farmer who saves for his children a home of good influences, in true thoughtfulness, true usefulness, true affections and a wholesome life, saves all there is worth having in any life, and builds for himself an immortal monument. What any farmer and his wife can do for their children by looking after the waste to stop the leaks of life, only those who have tried it can tell.

Electricity on the Farm.

EDITOR KANSAS FARMER:—As time goes on, the inventive mind of man is constantly striving to reduce the labor and expense of the world to as near the minimum as possible. For years human ingenuity has constantly devised labor-saving and money-saving machines, and there still seems to be no limit to the field of invention.

Steam was introduced and has been a partial success. Its chief disadvantages, however, have been its cost and inefficiency, not over 5 to 15 per cent. of the actual caloric energy of the coal appearing as motive force. Electricity has come to our use and we are confident that it is but a question of a few years when all "man or mule" power, as well as 90 per cent. of the steam engines, will be replaced by the electric motor.

Taking into consideration economy alone, but little investigation is necessary to prove the comparative cheapness of electrical energy. Careful calculations on the relative cheapness of the three methods of power—electric, steam and horse-power—taking electricity as the unit, have deduced the following table:*

	Electric.	Steam.	Horse
Original cost	1	.81	.54
Motive power	1	1.06	1.45
Repairs	1	2.09	2.53
Operating expenses	1	1.71	2.38
Danger	1	2.34	.14
Total	5	8.01	7.84
Average	1	1.60	1.46

This proves conclusively that in all respects electricity is an advantageous agent in the transmission of motive force. Then the question naturally arises, why cannot it be employed on the farm instead of the slow and laborious horse or hand power?

The main objection seems to be the cost of material and the complexity of the machines. But this is not so great as the majority of the people are apt to suppose. Taking into account the cost of running, after the little plant has once been established, there can be no doubt whatever that there are greater economizers than steam and horse-power.

Allow me to cite a test of the practicability of electric light and motive power:

Several years ago a practical farmer made some experiments in order to

*The usual method of generating electrical energy is by the use of a dynamo driven by a steam engine. There are considerable losses in transforming the motion of the engine to electricity and reconverting it to motion through the use of the dynamo, so that unless some cheaper source of power were used as a basis for this table the figures would be misleading.—Editor.

prove the efficiency of electricity on the farm. He used an old-fashioned wind-mill, with four arms at right angles to each other, and each thirteen feet long. There was no special regulating device, the dynamo being belted directly to the fly-wheel of the mill, and charged twelve cells of storage battery, which supplied the incandescent lamps in the cottage. With a good breeze electricity enough could be stored in four hours to supply ten incandescent lamps and an arc lamp for three evenings of three or four hours each. While charging the current passed through a cut-out which disconnected the dynamo when the speed was too low, or run below a certain rate. The wind-mill being allowed to run all the time, charging the battery when the wind happened to be strong enough, the current was used to run small shop machinery, and by the addition of a few more cells of the storage battery all the stationary machinery of the farm can be operated at will—easily, safely and almost without cost.

Wind-mills much superior to that used may be readily purchased, and many farmers already have them for pumping purposes. A small dynamo can be purchased or built at a small cost, and the storage battery can be made or bought readily. With them we can light our homes economically; our light would be better, cooler and healthier than gas and oil lamps, while the current could be used for running fans, sewing machines and other household machinery. Indeed, to the average American with some spare time and some small ingenuity, the amusement and instruction of such a plant would more than pay for its original cost.

Another farmer while experimenting on the advantages of chemical electricity about the farm has entirely cured his horses of the bad habit of cribbing and biting each other in the stall. By an ingenious arrangement in the electrical connections and an induction coil, the savage horse is made to feel a twinge of the current at every attempt to bite the other, or to crib. The cost of such an arrangement is but three or four dollars at the most, and we hope to see in the future a wider and more extensive use of this wonderful agent. Telephones of the simple acoustic type can be connected with the various buildings of the farm at a cost of less than a dollar, thus giving instant, easy and perfect communication.

The experiments, which have been given with the known facts concerning electricity, opens to us at once a field of ingenuity, comfort and amusement. Eureka, Kas. R. L. N.

Plant Groves of Timber.

EDITOR KANSAS FARMER:—In the FARMER of the 8th inst., under the above heading, was an article signed by T. C. Moffatt, that in my judgment needs severe criticism. "I suppose, as usual," he writes, "they will be planted for every purpose except the one for which they are most needed," a mild form of saying to the farmers all over this beautiful State, who have for years past been planting trees, that they did not know what they needed. Listen to the next statement of tree lore, or rather ignorance: "Some will plant large orchards, expecting that to be an easy way to make a great amount of money, and they will almost certainly be disappointed."

I have lived in Kansas a good many years and have been a reader of the KANSAS FARMER since early in the '70's, but this article by this wonderful cyclopedia of horticultural knowledge is the first to discourage the planting of either a large or small orchard, that I remember to have seen. On the contrary, all that I have read on this subject, and my own observation and some considerable experience, have all been in favor of the planting of orchards. Good money has been and will continue to be made by orchardists; the past season was the only one for fifteen years but what I have made money out of my orchard, and I am not the only one; hundreds of farmers in Sumner county have done the same. There are a number in the State who

It is very difficult.

to convince children that a medicine is "nice to take"—this trouble is not experienced in administering



Scott's Emulsion

of Cod Liver Oil. It is almost as palatable as milk. No preparation so rapidly builds up good flesh, strength and nerve force. Mothers the world over rely upon it in all wasting diseases that children are heir to.

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

have, if it were in silver, made a "barrel" of money. Judge F. Wellhouse, of Leavenworth county, two years ago last December, at the annual meeting of the State Horticultural Society, by report stated that the product of his orchards was over 79,000 bushels of apples; gross receipts for same over \$50,000.00; net, over \$36,000.00. And yet this wise-acre, T. C. M., says they will almost certainly be disappointed who plant an orchard expecting to make money by it.

Here is some more theory: "Some will fill up their front yards with evergreens, which make no shade, and in a few years will obstruct the view and make the air stifling about the house."

Obstructing the view with a nicely arranged lot of evergreens around the farmer's home would be disastrous, but nothing in comparison with the stifling atmosphere, especially in the winter. It seems almost incredible that any sane man should be averse to planting the different varieties of evergreens either around the rural or city home. I have over 125 evergreen trees around my house, from five to twenty feet high, all nice, symmetrical trees, especially the red cedar, this being the queen among evergreens when properly managed. Neither myself or family have ever experienced any inconvenience from these trees around our house, but on the contrary, during the heat of summer the air, as it sifted through those trees, was perceptibly cooler than on any other part of the farm. Then in the winter they break the force of the wintry wind and are a pleasant contrast to the snow-covered ground. Here follows what I am satisfied is original with Mr. M., viz: "Some will put out hedges, which disfigure the landscape and make travel along the road almost unendurable."

If every quarter section in the State were "disfigured" by a ten foot hedge all around it and one or two lines dividing it into eighty or forty acre fields, this would accomplish more in the way of climatic changes than all the timber belts that have been planted or will hereafter be planted. I am at a loss to understand how any one could work himself up to believe or to imagine that hedge fences, properly cared for, disfigure the landscape.

From personal experience I can readily understand the unendurable part of traveling along the highway in warm weather with a hedge fence on one or both sides of the road. The summer heat is more than offset by the wind-break afforded in the winter. No one who has traveled over these treeless prairies during the progress of a "northerner," the wind blowing at from forty to sixty miles an hour, who, when passing behind the summer anathematized hedge fence but what has felt a sense of great relief, at least enough to make a stand-off for the discomfort of the summer. Mr. M.'s classing box-elder and soft maple for timber purposes, aside from fuel, shows his ignorance of what he is writing about; and so on all through the article, it reads and sounds not like a practical farmer or horticulturist, but more like a sidewalk farmer. What I mean by a "sidewalk farmer" is a one-horse lawyer, doctor or preacher—farmers who would like to and very often do farm the farmers, always ready on all occasions, in season and out of season, to give the farmer advice, tell him what he needs, what to do, and what not to do, and so on *ad infinitum*.

G. W. BAILEY.
Wellington, Kas.

The Horse.

Congressman and Trotting Horses.

The trotting horse interest is one of the most universally distributed branches of the animal industry in this country, and it is not surprising that some of the owners go to Congress. The Washington correspondent of the St. Louis Daily *Globe-Democrat* recently interviewed a member and telegraphed his paper the following pertinent information:

"What is the matter with the trotting horse market?"

This pertinent question was put to the Hon. Joseph C. Sibley, member of Congress from the Twenty-sixth Pennsylvania district, this evening at the Shoreham. It may be mentioned in this connection that Mr. Sibley, in conjunction with his partner, Miller, is one of the largest and most successful breeders of the light harness horse in the world. Over the breeding stud at Franklin, rightly named the "Palo Alto of the East," presides that inimitable horseman, trainer and driver, Charles Marvin, who trained and drove to their records Palo Alto 2:08½, Sunol 2:08¼, Bell Bird (1 year) 2:26¼, Arion (2 years) 2:10¼, and a number of others known in turf history as stars of the first magnitude.

"To enter into all of the causes that have led to the present depression in the trotting horse market would take more time than I can spare at present," said Mr. Sibley. "In a general way the fault lies mainly at the door of horsemen and horse-breeders, which I will illustrate as I progress in my diagnosis. The public must understand that there are at the present time hundreds of men breeding horses, some for profit and a few for the pleasure they find in the occupation. However, out of the hundreds engaged in the business only a small percentage breed intelligently. Too many breeders are ignorant of and indifferent to blood lines and the science of blending them, the result being that the market is glutted nowadays with trotters that cannot trot; with horses that ought to be drawing plows and lumber wagons. Then, again, the 'standard' craze has transgressed all reasonable limits. Individuality has too frequently been sacrificed to pedigree that had no other merit but blood to sustain it. With the sacrifice of individuality there have been foaled a large number of scrubby, misshapen, undersized, and oftentimes blemished animals, which in turn have been sent to the auction mart. Nine times out of ten they have been too slow for the track or road driving; too light for draft or general purposes, and too small and homely for the carriage.

BY-BIDDING AT AUCTIONS.

"Another cause for the present depression in the trotting horse market is by-bidding at auction sales. There are auctioneers that are honest with seller and buyer, but I am sorry to say they are largely in the minority. It is within my own observation when I state that I know of horses sent to the auction blocks by their owners with the distinct understanding that if they did not bring a certain price they were to be bid in, while at the same time it was given out in advance by the auctioneer that the sale was to be positive and without reserve. Would-be purchasers have learned these things, have become suspicious, lost confidence, and as a rule are staying away from auction sales, or not bidding if they do attend them. Last, but not least, the trotting horse industry is suffering from dishonest racing associations and unfair and dishonest judges in the stand. When a racing association will permit wealthy breeders and owners of horses to enter with the distinct understanding that if their horses do not win races in their class no entry fee is to be demanded of them, while others are compelled to pay according to the rules to the last cent, such discrimination is injurious to the horse-breeding industry and disgusts breeders. Not only does it disgust honest men who breed horses, but these things deter gentlemen who would be willing to invest large sums of money in a breeding stud, tend to cripple the sale of stock and by implication the breeding business in general. In addition to this, more horse papers are published than there is a healthy demand for, the consequence being that the rottenness which I have illustrated is either defended or ignored. Only a few are honest and outspoken enough to openly expose and denounce the things spoken of. Until we purify racing associations and the entire turf paraphernalia and return to honest and open-and-above-board methods, until every breeder erects a high standard of breeding and breeds up to it, the slum in the trotting horse breeding business will continue."

HIGH STUD FEES.

"Then you think high stud fees cut no figure in the depression?"

"I certainly think they do not. I do not know of a stallion finding for a high fee to-day, or stood for one the past year, that is not worth the price asked. Nor do I know of one that did not have his book full. Why, I paid a \$1,000 fee for a service to Axtell. I not only paid the money willingly

but consider that I got the worth of my money. When St. Bel was alive his fee was \$500, and even at that figure his bookings were at a premium. I have no doubt that high as are the service fees of Arion, Allerton, Kremlin, Stamboul, Axtell, Sidney and numerous other high-class stallions, their books will fill rapidly, which is the best evidence in the world that their fees are not too high."

"You have some of the blood of the Moor in your stud, have you not?"

"Yes, and value it highly for breeding purposes. It is hot blood, but virile and full of that mysterious quality called nerve force. I have a daughter of Beautiful Bells by the Moor that is very fast, but inclined to nervousness, like her dam. By the way, I have been for some time investigating the pedigree of Belle of Wabash, dam of the Moor. I have got far enough in the matter to satisfy myself that she was not of Morgan blood, as is asserted by some. She was nearly if not quite thoroughbred and sired by Ballinger. Orrin Hancock, who knew her and had seen her race, says she was as much like a thoroughbred as any of the blood he had ever known. We have been tracing the breeding of this mare for three years, and have the evidence of her breeding about completed."

THE TROTTER OF THE FUTURE.

"How will the trotter of the future be armed?"

"With just enough iron to protect his feet. My impression is that in racing he will be compelled, in a majority of cases, to wear boots to protect himself, although their weight is a disadvantage to extreme speed. Mr. Hamlin, the great Buffalo breeder, illustrated to me not long since how much of an impediment they are. Prince Regent was trotting a race in the mud with boots on that weighed fourteen ounces. He was tiring and likely to lose the race. Mr. Hamlin ordered the boots off, and Regent went in and won it."

"How much lower is the trotting record to go?"

"It will probably get to two minutes for the mile, and perhaps a little lower than that, but it will take time. The bicycle sulky has proven a great auxiliary to extreme speed. In my opinion it is from three to six seconds faster than the high wheel sulky. We would not have seen the records lowered to such an amazing extent in the summer of '92 but for the 'bike.' I am inclined to think that such an aid is the 'bike' to speed that it pushes the horse along rather than being a load which he is expected to be handicapped with. Let me illustrate: Put a man on a bicycle sulky, let another hold the shafts slightly above horizontal and see how that sulky will shoot forward."

"The Fifty-third Congress seems to be quite a 'horsey' one?"

"Yes, I shall not be as lonesome as I thought. We can, if we please, form a horse parliament. There is in the Senate Stanford, Stewart, Stockbridge and Mitchell of Wisconsin, all large and eminent breeders. In the House there will be, beside myself, Hatch of Missouri, Hayes of Iowa, Wadsworth of New York, White of Ohio, Price of Louisiana, Bailey of Texas, and many others that I do not at present recall. The horse will be well protected if we can catch the Speaker's eye, and no one can say us neigh."

Whereupon the sage of Franklin quickly disappeared.

Treatment of Horses During the Shedding Season.

The season of the year is rapidly approaching, and, in some cases, has already arrived, when horses are changing their coats; and as a rule this is a trying period for the animal. Dropping the old hair and growing new causes a ceaseless itching and general uneasiness which militate against thrift. It affects the freest, fleetest and best, apparently, more than the passive and less nervous animals, and makes them dull and sluggish, predisposes to disease and is more or less debilitating. Few horses at work pass through this period without becoming obviously out of sorts. There is, perhaps nothing definite the matter with them; but they are out of working condition, labor mechanically instead of cheerfully, and become easily fatigued. Shedding and replenishing the coat is a critical period, and should be so regarded by all who have the care of working horses. They should be eased of their work, and extra care and feed be bestowed. Unless debility is decidedly marked, "condition powders" or other drugs should not be administered; but rather let the "medicant" come from the oat-bin and bran-box in more generous rations. But if the horse gets much debilitated (which he will if not properly worked, fed and groomed), the following is advisable: Take carbonate of iron, powdered gentian, ginger and aniseed, of each three ounces, mix and divide into twelve equal parts and give one part twice a day. This is an excellent tonic, and never harmful. The greatest neglect at such times is usually in inefficient grooming. The card or curry-comb is shiftlessly manipu-

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

Royal Baking Powder

ABSOLUTELY PURE

The Poultry Yard.

Poultry Notes.

A fat hen will not lay well, neither will a half fed one.

Millet is a good grain to feed whole to young chickens.

Charcoal should always be kept where fowls and chicks have access to it.

Do not expect an incubator to hatch a better percentage of eggs than the hen.

If you wish to prevent gapes in chicks scatter plenty of air-slacked lime freely where they are kept.

To secure the best growth with young fowls an even temperature is fully as important as the food and drink.

The best remedy for chicken cholera is a teaspoonful of liquid carbolic acid in each half gallon of the drinking water.

A good remedy for gapes is a teaspoonful of spirits of turpentine mixed with every quart of corn meal fed your chicks. Use air-slacked lime freely in their runs.

Chicks hatched in an incubator are free from lice. Do not put chicks hatched by a hen in a brooder kept for your incubator chicks. If you do it will soon get supplied with lice.

Hens are greatly benefitted by drinking lime water. It is a good idea to once a week fill the drinking troughs with a milky solution of lime, letting it remain one day, after which thoroughly clean the troughs.

A safe and effectual way of ridding young chicks of vermin is to rub a little clear lard, every now and then, on their heads and along their throats, and over the bare surface on the body and beneath the wings.

For young chicks to thrive in a brooder they must be kept warm at night, and plenty of exercise during the day until eight weeks old, then turn them in the fattening department, feeding soft, sweet food for two weeks and they are ready for market.

Lack of vitality and color-matter in the bulbs causes the hair to fall out and turn gray. We recommend Hall's Hair Renewer to prevent baldness and grayness.

Great hearts alone understand how much glory there is in being good.—Farmer's Review.

Special Announcement.

We have made arrangements with Dr. B. J. Kendall C., publishers of "A Treatise on the Horse and His Diseases," which will enable all our subscribers to obtain a copy of that valuable work free by sending their address (enclosing a 2 cent stamp for mailing same) to Dr. J. B. KENDALL CO., ENOSBURG FALLS, VT. This book is now recognized as standard authority upon all diseases of the horse, as its phenomenal sale attests, over four million copies having been sold in the past ten years, a sale never before reached by any publication in the same period of time. We feel confident that our patrons will appreciate the work, and be glad to avail themselves of this opportunity of obtaining a valuable book.

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

"Jersey" Poultry Netting is not made of galvanized wire, but is galvanized after it is woven, thoroughly protecting the joints, and thus preventing rust.

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YOUR DEALER CAN GET IT, IF YOU INSIST.

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Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

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All advertising intended for the current week should reach this office not later than Monday.

Every advertiser will receive a copy of the paper free during the publication of the advertisement.

Address all orders
KANSAS FARMER CO., Topeka, Kas.

It is reported that Congress will be convened in extra session in September.

The aggregate of the world's wheat crop for 1892 is put down in the final reports at 2,352,537,497 bushels. Of this the United States produced over one-fifth, or 515,949,000 bushels. Of the wheat produced in the United States Kansas furnished rather less than one-seventh, or 70,831,000 bushels. Of her crop of 1892 Kansas was reported to have had on hand March first about one-fourth, or 17,707,750 bushels.

J. E. Nissley, President of the State Dairy Association, has written R. L. Wright, of Topeka, Kas., asking that an effort be made to get the dairy appropriation for the exhibit at Chicago increased. The matter will be brought before the board, and all parties desiring to make an exhibit should apply to R. L. Wright immediately, as all space will have to be allotted to individual exhibits and not as a whole to the State Association.

According to the latest government statistics and values Kansas has 1,000,594 horses, value, \$55,626,845; 92,399 mules, value, \$6,186,220; 727,080 milch cows, value, \$13,450,980; cattle other than milch cows, 1,958,735, value, \$31,772,640; 2,445,341 hogs, value, \$19,329,687, and 389,627 sheep, valued at \$974,033. The total number of live stock being 6,613,776 head, which at the conservative average value estimated, is worth \$127,340,405.

The fight for the enforcement of the prohibition law in Kansas is being pushed with commendable vigor. The State Temperance Union is taking an aggressive part and the new Attorney General is doing all in his power to assist in the good work. It is stated that over \$6,000 worth of liquor has been confiscated by the authorities within the last four days. If the good work continues and spreads as now seems likely that it will, not many months will pass before all Kansas will be as dry as Topeka.

There are hundreds of thousands of acres of rich buffalo grass in western Kansas capable of sustaining immense herds of stock during a large part of the year, while grain and forage, which may well be fed during the remaining few months, are sold here at prices which scarcely pay wages for producing them. The plains may not be adapted to sustain as many cattle to a given number of acres as are regions where rain is more abundant, but it is difficult to understand why there may not be a profit in keeping good stock on these cheap ranges in as great numbers as will practically consume the grass and other crops.

WORLD'S FAIR APPROPRIATION.

Mr. R. L. Wright, of Topeka, furnishes the **KANSAS FARMER** a memorandum from which it appears that the Kansas Board of World's Fair Managers is now confronted with serious difficulties in the apportionment of the appropriation to the several interests which should be represented at the fair. Mr. Wright shows that several of the important agricultural interests have been fairly well provided for; \$9,000 has been appropriated for general agriculture and \$4,000 for horticulture, but with these exceptions the other branches of agriculture are practically unprovided for. The live stock industry of Kansas is, perhaps, the most important in the State, those engaged in the various branches of the business having over \$100,000,000 invested in stock alone, according to the latest statistics of the State Board of Agriculture, beside about \$13,000,000 which is invested in milch cows. These two important industries are only allowed \$500 each, a sum barely sufficient to pay the freight expenses of the dairy exhibit, and not a quarter enough to pay the freight on the live stock exhibit.

President Coburn has appealed to the Columbian clubs of the State to wait for the refunding of their money until another appropriation has been made by the Legislature; and it is suggested that all interested in the Kansas exhibit should do what they can to bring about this desirable arrangement. It is evident that something will have to be done or there cannot possibly be an exhibit of the live stock and dairy industries of the State. Mr. Wright disclaims any intention to adversely criticize the action of the board, but concedes the trouble to be that the board has not the necessary means to do adequately for all the diversified industries of the State, but holds that something should be done that will render a modicum of justice to the live stock and dairy industries of this State, the importance of which is universally acknowledged. He thinks that the sheep industry alone should have more than has been allowed for all kinds of live stock. The wool clip of Kansas is worth \$74,000 per annum and could be greatly increased if proper legislation can be had with regard to wolves and dogs that now destroy the flocks. The swine industry yields \$13,000,000 a year to those engaged in the business.

The value of the animals fattened for slaughtering purposes each year amounts to \$33,450,000, and this immense industry has to be represented out of its quota of the \$500 allowed to live stock, to say nothing of horses and mules, and also the \$2,500,000 worth of poultry and eggs that are annually produced and marketed in this State. The dairy business yields over \$5,000,000 a year beside what is consumed in the homes of the producers. Mr. Wright sums the matter up by saying: "The capital invested in these two great industries, together with the lands and buildings necessary for carrying on the business, will amount to about one-third of the total wealth of the State, and will therefore be taxed not less than \$20,000 for the purpose of creating the funds from which this appropriation is made. And therefore when it is remembered that only \$1,000 is appropriated in return it is evident that the people engaged in the business are not getting what is their due."

LABOR AND CAPITAL IN COURT.

Last Monday was a field day in the United States court, at Toledo, Ohio, for it began the trial of six great cases. The first is that of the engineers and firemen of the Lake Shore on the charge of contempt of court in failing to obey an injunction of the court. The second is that of the restraining order granted by Judge Ricks, of Cleveland, early in the struggle, which prevents the connecting railroads in Toledo from refusing to accept the freight from the Ann Arbor, and is based upon the provisions of the inter-State commerce law. The third is the order granted by Judge Taft, at Detroit, restraining Chiefs Arthur and Sargent from issuing or keeping in force any

order which they had already issued to employes of any railroads to refuse to accept the business of the Toledo & Ann Arbor railroad. The fourth injunction was that ordering Chief Arthur and Chairman Watson of the Lake Shore to bring into court any order or rule of the Brotherhood of Locomotive Engineers, which was the basis for ordering a strike. The fifth is the restraining of about a hundred employes of the Wheeling & Lake Erie railroad from refusing to accept or handle the freight or cars of the Toledo & Ann Arbor Railroad Company. The sixth is the suit for \$300,000 damages filed by Manager H. W. Ashley, of the Ann Arbor road, against Chief Arthur and Sargent, based on the strike and the refusal to transfer it to connecting lines.

The first of these cases is one of peculiar interest, because it involves the construction of the doctrine of personal rights which differs from what has usually been considered good law. The order affects the right of men to discontinue personal service at pleasure. Should it be held that the courts may interfere by injunction with the discontinuance of contracts for personal services to be rendered, strikes will be impossible, for the strike would immediately be in contempt of court. It remains to be seen whether this view will be upheld on a full hearing of the arguments, and also whether, if the court holds that it can interfere with the discontinuance of work by the employes, it will also hold that it can interfere with their discharge by employers.

THE AMOUNT OF WHEAT ON HAND.

The March report of the Department of Agriculture says: "The estimated proportion of wheat on hand is 26.2 per cent. of the last crop, the smallest percentage in ten years. The quantity on hand aggregates 135,000,000 bushels, 36,000,000 bushels less than last March, and 23,000,000 more than the remnant of the very small crop of 1890. A very large proportion is found in States that do not spare a bushel for commercial distribution; only 34,000,000 in the principal spring wheat States, Minnesota, the Dakotas, Nebraska and Iowa, more than half of which is required for seed in the spring. Of the winter wheat States only Kansas and California have any considerable surplus available for commercial distribution. In the four States of the Ohio valley there are only 31,000,000 bushels, scarcely enough for consumption of local mills for home use. It is never realized in the great grain markets that the south, middle and eastern States, and mountain areas are buyers and not sellers of grain, and that at least thirty-two States and some Territories, always holding some wheat supplies, never contribute to the needs of other States and other countries, but instead draw upon the stocks of grain markets to eke out the requirements of home consumption. Another fact is not sufficiently considered, that after a full crop the invisible reserves are necessarily larger, more grain is absorbed in almost inappreciable and practically unavailable remnants in farm granaries than after the smaller crops. The result is commercially deceptive, as expected receipts are never realized. Reserves now are all the smaller for the disastrous experience of last year, when grain was systematically withheld, through ill-advised counsel, from a crop the largest ever known in the world's history of wheat-growing, giving opportunity for search in all corners of the earth for required supplies, and insuring precipitate fall of prices on the recurrence and increased momentum of the movement. This season's free movement has naturally followed the heavy losses and bitter experience of last year."

The receipts of live stock at the Kansas City stock yards for 1893 show but a slight increase of cattle, while a marked decrease is noted in the receipts of hogs.

Stockmen of the West will be pleased to know that Eli Titus has been made the general live stock agent of the Santa Fe railway company.

THE GOOD ROADS MOVEMENT.

The ardor with which the discussion of the question of better highways is discussed and the sudden impetus given to the advocacy of the farmer's interest in cheapening the transportation of his products from the farm to the railroad station or the market town, suggested to many that an interested motive lay behind much of the new-born enthusiasm. But the importance of the most economical application of the expenditures which the public applies to the repair and betterment of its roads was not really lessened when it was discovered that the movement was inaugurated, and that the discussion is maintained largely by one of the largest bicycle manufacturers in the country, possibly as a means of making practicable the more general use of his machines. The interest of the general public was no doubt somewhat abated when in the name of the good roads movement it was proposed that a government road department be established and it was realized that the proposition carried with it something suggestive of the creation of a place and public pay for some one now ready to step into it.

But these considerations sink in importance when the deep mud of ordinary roads in spring-time emphasizes their disadvantages. That there are at this time serious inconveniences arising from the condition of most roads is only too true. The uncertainty as to how long present conditions will continue, or how much worse the roads will become on account of the spring rains is poor consolation.

A half century ago the question of roads assumed a prominence even greater than at present. Then the general government engaged in the construction of a road, portions of which may be seen as far west as Ohio and Indiana to this day. At this time road companies were chartered for the construction of roads for the use of which they charged "toll."

But the advent of the iron road with the iron horse to travel upon it placed a period to the ardor of the road movement of that day by greatly lessening the use of all other highways. The iron horse has multiplied exceedingly. He has grown to several times his original dimensions. The iron road has given place to a road of steel; light rails to heavy ones; and the traffic carried over these roads would have appalled the projectors of the great national turnpike road of the former period.

But while the iron horse has grown larger and the iron road has been made heavier and more expensive, there has been a development also of light and comparatively cheap roads and equipments. On some of these roads the propelling power is obtained by means of small locomotive steam engines, on some by electricity, on some from horses or mules. Gasoline and ammonia engines have been built and afford economical power for light work.

On the sugar plantations in Louisiana one of the most serious problems is that of bringing the cane from the often swampy fields to the factory. The most progressive planters now provide portable iron tracks, which are laid to the fields and extended or moved as the convenience of the work demands.

All this is suggestive that the iron road, or rather the steel road, may speedily become the common road of the more densely settled communities, especially in the comparatively level portions of the Mississippi valley States. This may not suit the bicycle manufacturers any better than the railroad innovation suited the projectors of turnpikes and plank roads in days gone by. But the present is sometimes characterized as the age of steel, and it is not improbable that the first quarter of the next century will witness the construction of more country roads of steel than of stone.

A prominent firm of live stock merchants at Kansas City, in a recent letter make use of the following significant statement: "The speculative provision market seems to be in the hands of professional manipulators, and they are milking the market for all it is worth."

WHEAT IN WESTERN KANSAS.

At no time of the year more than during the last half of March is manifested the effect of the difference of climatic conditions of the country lying east and that lying west of the ninety-ninth degree of longitude.

Indeed it is only a few weeks since winter wheat sowing was discontinued in the region west of longitude ninety-nine.

The experience of all other sections is in many things apparently reversed by that of the wheat raisers of western Kansas. Thus it has been much and often written and many times spoken that thorough plowing is necessary to the production of a good wheat crop.

It has been reported that western Kansas has a poor prospect for a wheat crop this year. Superficially there appears to be no prospect, but conversation with large numbers of western Kansas farmers has convinced the writer that much of the wheat is sprouted and that the situation is not more unfavorable than it has been at this time of some of the years which have yielded the greatest crops.

White & Rial, live stock commission merchants, of Kansas City, write the KANSAS FARMER under date March 25: Cattle receipts for the past week were 20,231, against 19,468 previous week and 17,907 corresponding week last year.

The quality of the cattle on sale were mostly medium and common, there being very few extra prime cattle among the offerings. The light receipts here the past week and also at Eastern markets has had a tendency to strengthen prices 15 to 25 cents.

SHAWNEE COUNTY HORTICULTURAL SOCIETY.

A very interesting meeting of the Shawnee County Horticultural Society was held March 25 in the parlor of Lincoln Post hall.

Mr. G. W. R. Ward, of Menoken, discussed very thoroughly the "Protection of Orchards by Wind-breaks." Thought it necessary, especially on the south and west, and considered the Russian mulberry useful for that purpose.

This brought a strong dissent from Philip Lux. Thought an orchard, if rightly trained, should protect itself. Assist nature by training and trimming, and a well-balanced tree, able to protect itself, will be the result.

The "Best Paying Branch of Horticulture" was ably presented by Philip Lux. Thought location, soil, etc., entered largely into the calculations. Proximity to city market would warrant success with small fruit.

G. W. Vanorsdal related his exceptional luck with the Early Richmond cherry. An orchard planted on "hard-pan" with a thin upper soil had not failed in fifteen years to yield a fair crop of cherries.

Mrs. Walter Bates read a delightful paper on that general favorite, "The Chrysanthemum," which will appear in the KANSAS FARMER. Mrs. Bates earnestly urged each lady present to grow specimens for the contemplated display in connection with the meeting of the State Horticultural Society, and kindly invited the society to meet at her home in "Chrysanthemum time."

Program for the meeting in April is as follows: "Has Spraying Been a Success? Will it Be?" B. F. Vanorsdal; "House Adornments," Mrs. K. J. McCracken; "Gardening for Profit," J. I. Sims; "Our Friends in the Or-

chard," J. M. Priddy; "What is the Proper Location and Soil for an Apple Orchard?" John Armstrong.

The horticultural meetings have become so interesting that no member can afford to be absent.

DEALING IN FUTURES.

In discussing the Minneapolis Market Record's and Chicago Tribune's position on the merits of Senator Washburn's bill to license traders in "futures," the Tribune says editorially: "In defending the sale of 'futures,' the bull is often wont to say that he puts money in the farmer's pocket by selling future wheat \$1.10 when it actually stands at \$1 upon the open market."

Bad Case of Blight.

EDITOR KANSAS FARMER:—I will ask you to give me some advice through the KANSAS FARMER. My apple orchard was put out five years ago this spring. The trees all did well for two years: after that some were stricken with a blight and some died.

What can you advise to take the place of the trees that are dead, if any? What is better than Missouri Pippin? Halstead, Kas.

The above was referred to Prof. S. C. Mason, who has kindly furnished the following reply:

The above letter having been referred to me for reply, I will say I regard the above selection of varieties for a family orchard as a very good one, and would advise our friend to fill up his spaces with the same sorts that died. He has evidently had a bad siege of blight among his trees.

State Agricultural College, Manhattan, Kas., March 21, 1893.

Some farmers have never eaten celery, salsify, okra, cauliflower, or egg plant. It is as curious as a shoemaker going without shoes. A farmer should enjoy every luxury that can be had on the farm.

Orchard Culture in Southwestern Kansas.

Report of L. W. Leach, of Kingman county, to the twenty-sixth annual meeting of the Kansas Horticultural Society, at Winfield.

Orchard culture in southwestern Kansas is beset with many difficulties to overcome. But notwithstanding the high winds, droughts, gophers, rabbits and insect pests, the horticulturist may become fairly successful by adopting the proper means for combatting the difficulties to be encountered.

The preparation of the soil is another very important matter. In setting out an orchard the sod should be thoroughly subdued, the ground deeply plowed and well pulverized.

The gopher has been a great pest in orchards in this part of the State, especially doing great damage to apple trees by eating the roots off. The best means I have found for exterminating them has been by poison. Insert a little strychnine in a small piece of potato and drop it in their runs and cover up, and that will be the last of the gopher.

Our State society has been a great advantage in disseminating horticultural knowledge. But few, comparatively speaking, receive the reports and are benefited by their teachings. A good plan, in my judgment, for educating the people on this subject, would be to have a horticultural department in at least one paper in each county, conducted by some competent person.

Have plenty and a long continuous supply of the good things which nature—the kind old mother—has provided—beans, peas, lettuce, radishes, cabbage, "ingins," sweet corn, and many other things "too tedious to mention." They are life to the soul and pleasure all around.

The garden everywhere is a promoter of economy and health. In it nature pours forth her choicest and most wholesome gifts for the mere cost of seed and care. A home garden well attended is the most powerful foe of sheriff and doctor.

Do not be hoodwinked. Use no "just as good." Salvation Oil is what you want when in need of a good liniment.

Entomology.

Conducted by Prof. E. A. Popenoe, State Agricultural college, Manhattan, Kas., to whom queries about insects and specimens for determination may be sent, with request for reply in this paper. Answers will be published as soon as possible, and unless of immediate importance no other reply will be made. Always send several specimens, where possible, with statement of habits observed and, with the plant-feeders, parts of the plant attacked, where its name is not certainly known. Specimens may be packed, if small, in a quill; if larger, in a tight tin or other box, strong enough to prevent crushing in transit, and never loose in a letter. The package, addressed and marked with the name of the sender, without other writing, is mailable at the rate of 1 cent per ounce, prepaid.

The Green-Corn Worm.

How shall I protect tomatoes and green corn from the attacks of the corn-worm? M. R. Hoxie, Kas.

Answer.—This important question yet remains for satisfactory solution, not that the history of the insect is yet unknown, for it has been well worked out, but because from the circumstances ordinary methods of control are scarcely applicable. The parent moth is a night-flyer, and lays eggs in early summer on the heart leaves of the shooting corn-plant, the newly-hatched caterpillar eating through the rolled leaves into the heart of the terminal growth, and commonly proceeding then to burrow downward into the stem. Later in the season the eggs are laid largely on the silk of the young ear, though not restricted to that point. In either case the work of the caterpillar soon removes it from the surface and hides it from view. The worms may travel from one ear to another, and their migratory habit is especially marked in their attacks upon the fruits of the tomato, the ground-cherry, the pea and bean. When full-grown the caterpillar burrows into the soil and transforms in a cell at the lower end of the burrow into a pupa or chrysalis, in which state it commonly remains for about two weeks, the last brood, however, passing the winter as pupæ. The moth expands about an inch and three-quarters, and is of a general clay-yellow color, specimens of a darker greenish-yellow shade being common. In the middle of the fore wing is a dark spot, and toward the outer margin of the wing a transverse band also of a darker color. The hind wings are of a lighter yellowish shade, with a dark hind margin in which is a light spot.

Moths of this species are readily attracted by a bright light at night, and this habit is sometimes turned to their destruction by providing a trap, a flat tray of coal oil or the like, over which a lamp is placed so that the moths may fall into the trap on striking the lamp. Again, they may be attracted by a bait like that used by collectors in "sugaring for moths," a mixture of strong molasses and a little vinegar, spread over plates or plans, and many falling into the sticky fluid, will remain until drowned. The poisoning of such baits is also partially successful, though not to the degree warranted by the trouble and danger of the method.

From his experiments as to the effect of frost on the pupæ, Professor French has concluded that while the insect is uninjured by freezing while its cell in the soil is perfect, it is not so when the cell is broken up and the moist earth packed about the pupa. Hence he recommends late fall plowing as an effective and practical method of making war upon this pest. This measure, to be reasonably successful, must be generally practiced, as the moth is strong-winged and may fly to a considerable distance from the corn-field where it hatched, so that here again, as in so many other cases of insect attack, the careful man will suffer through the negligence of his neighbor. E. A. P.

The Tussock Moth.

Enclosed find specimens picked from my young orchard to-day. Are Nos. 2 and 3 the same insects? Please describe their habits. A. G. Richland, Kas.

Answer.—The specimens represent the empty cocoons and egg masses of the insect named at the head of this article. No. 1 is the empty pupa case of the male insect, within the flattened silver cocoon, spun upon the apple leaf,

as is usual with the caterpillars of both sexes. Nos. 2 and 3 are the empty pupa cases of the female moth, accompanied upon the outside of the cocoon by the masses of white eggs, covered by the dried white frothy coating exuded with them. The species is quite troublesome as an orchard insect if allowed to multiply, and, as I suggested in the FARMER of the 15th under the caption of "Work in Season," the present is a good time to reduce the possible number of the caterpillars by the collection and destruction of the leaves bearing egg masses. Occasionally the web of the female with the egg mass on the outside is found in a convenient depression of the bark, the angle of the limbs or other suitable shelter, but in the greater number of cases the leaf, anchored by a silken band to the branch, is the chosen support.

The natural history of the insect is briefly as follows: In May the eggs hatch, and the young caterpillars at once begin feeding on the leaves near by. If disturbed they drop, suspended by a silken thread, which they are always ready to spin upon the slightest jar, and upon which they ascend to the feeding ground again. The caterpillars reach full size in about a month from the time of hatching, and are then among the most beautiful of larval forms. They measure about an inch and a half in length, exclusive of the black plume-like tufts of hairs, two at the anterior and one at the posterior end of the body, which add nearly an inch to the apparent length of the insect. The color of the caterpillar is now varied and conspicuous, it being striped with black, gray and yellow, the head and back of first segment being red, and erect tufts of short hair on segments 4-7 cream color.

Spinning the whitish cocoon already referred to, the imprisoned larva transforms into the pupa, remaining in this state for two weeks, when the moth appears. The male moth is full-winged, expanding about an inch and a quarter, in color a dark-grayish brown, varied with darker near the base and near the tip, and having a conspicuous white dot near the inner corner of each upper wing. The female, on the other hand, is wingless, a mere clumsy gray body with legs, capable of crawling out of her cocoon and hanging to the outside of it, where, after she is met by the male, she deposits her mass of white eggs covered by the glistening, frothy coating above described. Two broods of the moths appear, the first maturing in early summer, the second in early autumn.

While from the wingless and inactive character of the female the spread of the insect is much diminished, the caterpillars are good travelers and will often wander from one tree to another before spinning a cocoon, and in time they may thus cover the entire orchard. But as they are specially accessible in the egg state during winter, and as the spring caterpillars are certain to be destroyed by the application, in bearing orchards, of a spray of paris green, the careful orchardist has little to fear from this insect. E. A. P.

The world's prizes are dross compared with the joy of a pure conscience and a life of usefulness to fellowmen.—The War Cry.

Nature is a good book-keeper—doesn't let us stay long in her debt before we settle for what we owe her.—Binghamton Republican.

Passionate reproofs are like medicines given scalding hot; the patient cannot take them. If we wish to do good to those we rebuke, we should labor for meekness of wisdom, and use soft words for hard arguments.—Dodd.

The Columbian Celebration Company, which is building "The MacKaye Spectatorium" at Chicago, received, a few days ago, five carloads of tropical flora from Jamaica, W. I., which will be used in equipping a single scene of the many to be presented in the Spectatorio. An idea of the realism with which every scene will be encompassed can be drawn from this fact. This flora, a sight in itself to the inhabitant of the colder clime, will all be used in the San Salvador scene in which is to be presented the landing of Columbus. Every other scene that will be displayed in this building will be on a like scale of correct environment.

Horticulture.

Missouri Valley Horticulturists.

EDITOR KANSAS FARMER:—The Missouri Valley Horticultural Society met in the office of Blair & Kauffman, Kansas City, nurserymen. The President, T. C. Evans, in the chair.

The previous minutes were read and approved.

L. A. Goodman, of Westport, read a well prepared paper on "The Horticultural Library." He regards a horticultural library as essential for the horticulturist as a law library for the lawyer.

Dr. H. Claggett, Kansas City, Mo., in endorsing the paper, advocated studying carefully the great book of nature. He spoke of the advantage of making practical experiments instead of trusting too much to the books.

Mr. J. J. Shirley, of Alvin, Texas, who is in the city with a load of strawberries, gave a number of interesting facts concerning fruit-growing in his section.

Apples and peaches were reported all right yet. The prospects are good for a large crop.

Under the head of small fruit, the fungi which is so prevalent this year on the raspberry, was quite fully discussed.

The consensus of opinion was that thorough and late cultivation will prove the most effective remedy. Spraying was also suggested.

After some further discussion the society adjourned to meet again on the third Saturday of April in the office of Blair & Kauffman.

GEO. E. ROSE, Secretary.
Kansas City, Mo.

Plant Groves of Timber.

EDITOR KANSAS FARMER:—I say amen to T. C. Moffatt's article in the FARMER of the 8th under the caption of "Plant Groves of Timber." Every farm should have a grove of timber. I have about fifteen varieties of forest trees in my grove and the one variety that appears to promise best for me is Corlina poplar. It is easy to propagate from cuttings (growing from two to six feet the first year), makes a fine shaped tree, not easily broken by wind or sleet, stands drouth well, and in fact has no serious fault that I know of. I have had the Corlina poplar only four years and should like to hear from some one who has had more experience. I should like to say to the readers of the FARMER, by all means let us plant trees; plant the best we can get. Will some one please tell us which is the best? I am going to plant, hit or miss, but we prefer to hit.

W. R. MACKLIN.
Haddam, Washington Co.

The Hot-Bed.

The best place in the garden should be selected for a hot-bed, protected from the cold winds, and facing the south or east. The covering should be provided first, as the frame can then be made to suit it. Common window-sashes, each containing nine lights of 8x10 glass, will answer well. These sashes, thirty-four inches in length, should fit across the frame, and as many as are necessary may be placed side by side. Being twenty-seven inches wide, three of them will make seven feet from left to right, which will be large enough for private use.

The frame may be of inch lumber—better inch and a half. It is simply a kind of box without top or bottom; the back part eighteen inches high, the upper part of the ends sloping gradually down to eight or ten inches high in front. Strips of lath reaching from front to back will be required to rest the sashes on when they meet.

The heat is obtained by the fermentation of fresh stable manure. A large pile of this should be made, say eight by four feet, and three in depth. The manure should be well forked over, leaving no lumps, and put on in layers, tramping each layer down evenly as put on. In a few days the heat will begin, and then the same process must be gone through again, making a new pile of it and tramping

PEOPLE FIND

That it is not wise to experiment with cheap compounds purporting to be blood-purifiers, but which have no real medicinal value. To make use of any other than the old standard AYER'S Sarsaparilla—the Superior Blood-purifier—is simply to invite loss of time, money, and health. If you are afflicted with Scrofula, Catarrh, Rheumatism, Dyspepsia, Eczema, Running Sores, Tumors, or any other blood disease, be assured that

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Of the breast, stomach, womb, nose, mouth, ear or any part of the body; catarrh, fistula, piles, tumor, tetter, eczema, old sores, syphilis, sexual weakness, many forms of female complaints, and all kinds of skin diseases, and consumption cured with soothing, balmy oils. For the benefit of those unable to bear the pain or expense of traveling and living away from home, Dr. Bye has been induced to give

Treatment for \$10 per Month,

by mail or express. Ninety-nine per cent. of all cases cured, and the 1 per cent. have had their lives prolonged and relieved from awful pains and torture. The

Oils are Cooling, Soothing, Healing,

easily applied. Full directions sent with the oils for self-treatment. No detention from business necessary. Over 1,000 persons cured last year of the most horrible forms of disease.

DR. D. M. BYE,

Indorsed by the highest medical authority. Dr. Plutarco Ornelos, Secretary of the Pan-American Medical Congress of the United States, gave Dr. Bye a letter of recommendation of him and his great remedy to the most eminent of the profession in Mexico City, Mexico, where the oils are being tested with astonishing results in the leading hospital of that great city. (Cut this out and mail it to some afflicted friend. This has, in the past, been the means of saving many precious lives.) His offices are in the Portsmouth building, in Kansas City, Kas. Consultation free.

down each layer as before. When warm enough (and it will be in four or five days) it is the right condition for the pit, which should be ready to receive it.

The pit is to be dug about two and a half feet deep, and a foot larger than the frame on every side. Into this pit the fermenting manure is placed, a layer at a time, until it is two feet deep, tramping each layer down well as before; then allowing the heating process to proceed for several days before putting on the soil. The soil—the very best garden soil to be had, mixed with one-third old, perfectly rotted manure—should be put on six or eight inches deep, and then the frame and sash on top of this.

After a few days, when the heat has fallen to 80 or 90°, the seeds may be sown. When the plants come up they are to have air by slightly raising or pushing aside the sash on warm days, but only in the middle of the day; and water must be supplied when needed, taking the chill off first so as to have it a little cooler than milk-warm.

On cold nights, or in stormy weather, protection of some kind will be required; mats, old carpets, or comforts laid over the sashes to keep out the cold. And as a permanent protection, it is well to bank up the outside of the frame all around with earth, five or six inches high.

The man of action is a deep thinker

In the Dairy.

THE DANISH DAIRY INDUSTRY.

Professor Georgeson, of the Kansas Experiment Station, has just returned from a trip to Denmark, where he went as the special agent of the United States Department of Agriculture, to investigate and report upon the dairy industry of that country.

In his preliminary report he gives many facts which will undoubtedly prove of value to the great and growing dairy industry of Kansas. Perhaps the most interesting part of the report is that devoted to a description of the methods of the Milk Supply Company, of Copenhagen. Of this company he says:

"The Milk Supply Company, of Copenhagen, is simply an organization which has taken upon itself to supply its patrons with absolutely pure and wholesome milk at a slightly advanced price above what milk can be bought for from the numerous other sources of supply. The company began business some fifteen years ago on a small scale, but for the month of December, 1879, the daily sales averaged 9,733 Danish pounds (10,728 pounds avoirdupois), and for December, 1892, 36,194 Danish pounds (39,896 pounds avoirdupois), and this at the season when milk is scarcest. The merit of the system consists, first, in the strict rules which have been laid down concerning the quality of the milk; second, in the painstaking cleanliness which obtains in the handling of the milk; and, thirdly, in the unflinching enforcement of the rules mentioned. Each dairy farmer of whom the company buys the milk must agree to conform to the following requirements in every particular:

1. The feed must be such that it does not affect the taste or character of the milk injuriously. The use of distillery slop and like substances for feed is absolutely prohibited, and the use of all feed that has been injured or is not well preserved. The use of turnips, kohlrabi, rutabagas, and the leaves of all kinds of root crops is prohibited. Carrots and mangels may be used to the extent of half a bushel per day for each cow, but only when the grain feed given amounts to seven pounds per day. Cows which supply milk for the use of children must not be fed mangels and carrots beyond the extent of one peck per day. Oil cake (rape-seed cake) may be fed to the extent of but one and one-half pounds per day, and this only in connection with at least five pounds of grain feed. Cows supplying milk for the use of children must not be fed oil cake of any kind. For other cows the grain mixture used shall receive the company's approval before delivery of milk can begin.

2. In the summer time the cows must not be fed in the barn under any conditions. They must be pastured on clover and grass. Vetches must not be used. When necessary, arrangement may be made with the company for the use of grain or green grain crops during the summer.

3. The cows must be clipped on the udder, tail, and hind-quarters in the fall before they are put in the barn.

4. The time of calving of cows in the herd must be distributed as evenly as possible through the year, so that the amount of milk delivered, especially during September and October, shall not be less than two-thirds of the greatest amount delivered in any month.

5. Fresh milk up to twelve days after calving must not be delivered, nor will the company receive milk from cows which give less than six pounds per day.

6. The utmost cleanliness must be observed in milking, and the milk must be strained through a metal strainer covered with a clean woolen cloth.

7. There must be at the disposal of the dairy at least thirty pounds of ice for every 100 pounds of milk produced on the farm.

8. Every dairy must be supplied with a Lawrence milk-cooler. This may be rented from the company if desired.

9. As soon as it is drawn from the cow, the milk must be cooled by the use of ice water on the milk-cooler, and this at all seasons of the year. This cooling should reduce the temperature of the milk to at least 4° Reaumur (41° F.) before it is shipped.

10. The milk must be delivered at the railway station once or twice daily, as the company may desire, either as sweet milk or as half-skimmed milk and cream. It must not be sent from the dairy farm sooner than necessary to make the train, and in summer the delivery wagon must be covered so as to shade the cans.

11. The company will supply the cans used for transportation, and they will be cleaned before they are shipped to the dairy farm.

12. The cans must be rinsed in cold water immediately on their arrival at the dairy. They must be kept in an airy place, protected from all dirt, with the lids removed and opening downward, but so that the air has free access to the interior, until they are used.

13. The cans must under no circumstances be used for anything else than the transportation of milk.

14. The dairy farmer must agree to answer all questions concerning the milk which the company may put to him.

15. The dairy farmer must permit one of the company's veterinarians to examine his cattle whenever he chooses, and must carry out the directions which the latter may give him. He must also agree to furnish transportation for the veterinarian to and from the railroad station.

16. Cows which the veterinarian finds have tuberculosis must be removed from the herd at once and disposed of as soon as possible.

17. Cows which are taken with any suspicious disease must be removed from the herd at once and the company informed of the fact, and if necessary the delivery of milk may be stopped until the veterinarian has had opportunity to examine the case. But in such cases the company will pay for the milk at the same rate as though it were delivered.

18. If any contagious disease occurs among the persons who live on the farm, or at the homes of the laborers who work on the farm, it shall be the duty of the dairyman to inform the company of the facts at once. The milk will in such cases be paid for at the usual rate.

19. This contract may be terminated either by the company or the dairyman on the first day of any year, but with at least six months' notice.

20. Should the milk be found to be of so inferior a quality as to be unfit for sale, the company reserves the right to stop its delivery without remuneration.

21. If the sale of milk in Copenhagen should be stopped by reason of an epidemic or other non-preventable cause, the delivery must be stopped for a shorter or longer period without remuneration.

"This very strict code is observed to the letter. At present the company receives milk from forty-two dairy farms, representing in round numbers 4,600 milch cows. To watch the health of these cows the company employs three skilled veterinarians, who spend all their time in traveling from farm to farm in order to examine periodically each individual in the herds, and also to see that the rules as regards feeding, etc., are observed.

"Probably no other city in the world is blessed with so thorough a system of control as regards the quality of the milk. And be it noted that it is not done under compulsion of law, but as a piece of business enterprise in private hands. The constitution of the company forbids a greater dividend than 5 per cent., and the price to the consumer is regulated on this basis. It further prohibits the two principal directors from having any financial interest in the company which might tempt them to work for greater profits. The prices paid to the producer for the milk are as follows: From the 1st of April to the 1st of September 20 ore per 'Kande' (2 kilograms—4,409 pounds avoirdupois), which is very nearly \$1.25 per hundred pounds avoirdupois. From September 1 to December 16, 26 ore per 2 kilograms, or \$1.61 per 100 pounds and from December 16 to April 1, 22 ore per 2 kilograms, or \$1.36 per 100 pounds. This is for the ordinary sweet milk. Milk for children costs rather more and the skim-milk correspondingly less. The company retails this milk from its wagons in the street at the following rates: Milk for children at 10 ore per half kilogram, ordinary milk at 8 ore per half kilogram, and skim-milk and buttermilk at 4 ore per half kilogram, which is approximately 5½ cents per quart for children's milk, 4½ cents per quart for sweet milk, and 2½ cents per quart for skim-milk and buttermilk. The cream is sold for 27 cents per quart for first quality and 16½ cents per quart for second quality. The cream which is not sold is made into butter, and in like manner the whole milk which is returned from the wagons is creamed and the skim-milk resulting sold to poor people at half price.

"I will mention, however, that I here found two pieces of dairy apparatus which are not generally known to our American dairymen, and which I find in every well-appointed dairy in Denmark. One is the Lawrence milk-cooler, and the other is a contrivance for heating the milk or cream to a temperature which kills all, or nearly all, bacteria which it may contain. This process is here called 'pasteurization,' after the great French scientist, who first called attention to this practical method of killing injurious bacteria. The milk-cooler is a hollow metal plate, with corrugated sides. It is about an inch thick and of any size, though usually about two feet square. It stands on edge, with corrugation

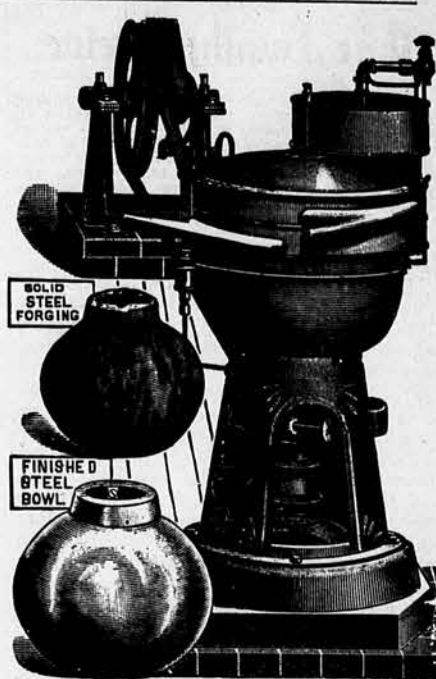
running horizontally. A stream of ice water runs through the inside of the plate back and forth in a zigzag course, while the cream or milk is poured into a little trough with many fine holes in a row along the bottom, which is placed on the upper edge of the cooler and from which it spreads in thin sheets over both sides of the cooler as it slowly moves to the bottom. It has the great advantage that it is easily cleaned, since the sides are not covered. There are other forms of coolers, but in those I have so far seen the principle is the same. This cooler is in general use when the cream is to be cooled rapidly to any desired temperature.

"The principle of the 'pasteurizing' apparatus is equally simple. Steam is let in between the double walls of a small barrel-shaped tank or reservoir, which contains the cream or milk, and it is so arranged that the cream runs into the machine in a constant stream and out again at the same rate after having attained the desired temperature. A thermometer in the discharge pipe tells how hot it is, and the heat is regulated by admitting more or less steam through the valve on the steam pipe. This, too, is found in every dairy worthy of the name, and it is considered well-nigh indispensable when a fine grade of butter is aimed at. It is essential when an artificially prepared pure ferment is used for the cream, as it then becomes necessary to kill all other bacteria the cream may contain before it is added.

"And this brings me to that point in their dairy practice which above all others places the Danes ahead of the rest of the world, and which is perhaps the leading secret of the uniformly good quality of their butter. Pure cultures of cream ferments are in common use in all good dairies. I shall not now attempt to describe in detail what a 'pure culture' is, further than to say that it consists of bacteria, which in causing the fermentation of the cream gives the desired flavor and character to the butter, and which have been isolated and artificially cultivated. These 'pure cultures' are offered for sale by two or three laboratories, and they have met with the practical dairyman's approval, who, as stated, makes use of them in his daily practice. This pure culture is used as a starter in skim-milk at a given temperature, and when fermented this is again used as a starter for the cream.

"Compared with our Jerseys, Holstein-Friesians, and milking Shorthorns, the Danish dairy cattle do not impress me very favorably. Their milk is not rich enough in butter fat. I have seen no analysis of their milk that exceeded 3½ per cent. of fat, and most of them fall below that. They are, however, a hardy little race, thoroughly adapted to the somewhat austere conditions under which they live."

Very many other points of interest and value will be given in the final re-



If you know of any one contemplating buying Creamery or Cheese Factory Machinery, refer them to Davis & Rankin Bldg. and Mfg. Co., Chicago, Ill., largest manufacturers of these goods in the world. Low prices and fair dealing is their motto. Alexandra Improved Cream Separator a specialty. See cut above. Capacity 2,500 to 4,000 lbs. per hour. Two horse power will run it. They also manufacture Fairlamb Cheese Color, Fairlamb Cheese Dressing, Fairlamb Renet Extract, Fairlamb Butter Color and the Babcock Milk Tester and everything in the line of machinery and supplies for butter and cheese factories. If you wish to buy from the manufacturers direct, write for quotations and discounts. All goods guaranteed first-class or can be returned at our expense.

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port, and we suggest that Kansas dairymen write to Secretary Morton or to their Congressman for a copy of this valuable contribution to the dairy literature of our country.

The progressive man is always looking ahead; the non-progressive man is always sighing over the past.

Likeness comes from liking. If we like the pure, we grow in purity; if the impure in impurity.—S. S. Times.

I think we never know how much influence we have; a word uttered is not lost.—Food, Home and Garden.

Blessed is the man who cheerfully and faithfully performs the work his hands find to do.—Southern Cultivator.

"By the grace of God," said John Wesley, "I never fret; I repine at nothing; I am discontented at nothing."

"Tell me not of your doubts and discouragements," says Goethe: "I have plenty of my own. But talk to me of your hope and faith."

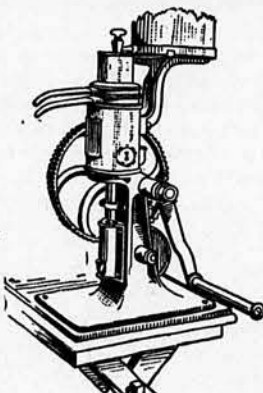
There are men who do not exhibit their temper in public for the simple reason that they do not want to be knocked down.—Talmage's Sparks.

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C - Cure for Pain.

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The Family Doctor.

Conducted by HENRY W. ROBY, M.D., consulting and operating surgeon, Topeka, Kas., to whom all correspondence relating to this department should be addressed.

The American Operation for Piles.

DEAR DOCTOR:—I promised to report to you how I am at six months after receiving the American operation, and I am delighted to tell you that so far as I can judge of myself I am perfectly well.

to assure you of my gratitude. Ever gratefully yours, P. S.—You may publish this if you wish, hold my name. Denver, Col., March 13, 1893.

The above eloquent tribute to a simple and safe surgical operation speaks for itself. The case was an aggravated one and quite unpromising at the time of operation.

Many an insane man and woman in our asylums might be restored to sanity and friends by this beneficent bit of surgery.

Answers to Correspondents.

FAMILY DOCTOR:—I have extremely sore nipples. After nursing the baby this morning I looked at one of my nipples and found that it had been bleeding in four different places.

Sore nipples are nearly always the result of some disorder of nutrition in the mother, and that needs a remedy adapted to the constitutional disorder.

The Apiary.

Edited by REV. E. T. ABBOTT, St. Joseph, Mo., to whom all communications relating to this department should be addressed.

A Beginner's Experience in Bee-Keeping.

EDITOR KANSAS FARMER:—Bee-keeping with me is only in its infancy, having commenced two years ago by purchasing my first colony from Mr. J. B. Kline, of Topeka, Kas., who advised me he had a superior strain of bees.

I got two swarms from this colony, which gave me about ten pounds of surplus and secured enough to winter upon, until they could gather enough to keep up brood rearing in the spring.

Mine have wintered and seem to be in good shape at this writing. Many have lost their bees, while some have a few stands left to start with again.

ISAAC GREENBAUM. Lecompton, Kas.

"For a long time I suffered with stomach and liver troubles, and could find no relief until I began to use Ayer's Pills. I took them regularly for a few months, and my health was completely restored."

ASTRONOMY AND ASTROLOGY.

The Science of Medicine and the Superstitions of Alchemy.

The astrologer of bygone ages taught the people that their diseases were due to some influence emanating from the stars or other heavenly bodies.

There is a most intimate connection between the condition of health of the inhabitants of our planet and the astronomical cycle through which it passes every year.

Pe-ru-na so exactly meets all these conditions that the demand is so great for this remedy at this season of the year that it is nearly impossible to supply it.

Those desiring to become thoroughly posted on diseases of spring and the proper selection of a remedy should send at once to the Pe-ru-na Drug Manufacturing Co., of Columbus, Ohio, for a free copy of "The Family Physician, No. 3," a book entirely devoted to this subject.

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UNION LABEL

The Veterinarian.

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

LEUCORRHOEA.—I have a mare 19 or 20 years old, that had three colts when young, but had not been bred since until last June.

Answer.—The trouble is leucorrhoea or catarrh, either of the vagina or of the womb, most likely the latter. It may have been due to the irritation caused in attempting to open the mare, or it may be due to old age or some other cause.

PARALYSIS IN SOW.—I have an eight-months-old sow that is weak in the back or lame in the hind legs, I cannot tell which.

Answer.—Your trouble is one of common occurrence, and we are sorry to say that we cannot advise you with much certainty of a cure.

Wednesday she seemed better; on Thursday she seemed partly blind, and would run against anything in her way, and that night became delirious.

Wednesday she seemed better; on Thursday she seemed partly blind, and would run against anything in her way, and that night became delirious.

Answer.—The symptoms given are very similar to those exhibited by the horses which died in Kansas two years ago, and which were supposed to be caused by eating wormy and mouldy corn.

Dr. Bull's Cough Syrup has always been kept up to the standard. It is the same it was forty years ago, the best sold.

"Look upon the bright side of your condition; then your discontents will disperse. Pore not upon your losses, but recount your mercies."

When a wise man said: Discretion is the better part of valor, all the cowards in the world found a motto for their caps.—Achtson Globe.

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Can this disease be cured? Most physicians say No.—It is; all forms and the worst cases. After years study and experiment I have found the remedy.—Epilepsy is cured by it; cured, not subdued by opiates—the old, treacherous, quack treatment.

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MARKET REPORTS.

LIVE STOCK MARKETS.

Kansas City, March 27, 1898.

Table with columns: No., Wt., Pr., No., Wt., Pr. for CATTLE—Receipts, 3,324 cattle; 41 calves. DRESSED BEEF AND SHIPPING STEERS.

Table with columns: No., Wt., Pr., No., Wt., Pr. for O-F. COLORADO STEERS, TEXAS STEERS.

Table with columns: No., Wt., Pr., No., Wt., Pr. for TEXAS COWS, COWS.

Table with columns: No., Wt., Pr., No., Wt., Pr. for BULLS.

Table with columns: No., Wt., Pr., No., Wt., Pr. for HEIFERS.

Table with columns: No., Wt., Pr., No., Wt., Pr. for CALVES.

Table with columns: No., Wt., Pr., No., Wt., Pr. for STOCKERS AND FEEDERS.

HOGS—Receipts, 3,113 Market closed considerable lower than opening prices.

Table with columns: No., Dock, Av., Pr., No., Dock, Av., Pr. for PIGS AND LIGHTS.

Table with columns: No., Wt., Pr., No., Wt., Pr. for REPRESENTATIVE SALES.

SHEEP—Receipts, 2,707. Market active.

Table with columns: No., Wt., Pr., No., Wt., Pr. for CLIPPED.

CATTLE—Receipts, 19,000. Beef steers, \$3 50 @ \$5 70; stockers and feeders, \$2 75 @ \$4 25; bulls, \$1 50 @ \$4 00; cows, \$2 00 @ \$3 85.

HOGS—Receipts, 18,000 Market closed steady. Mixed, \$7 00 @ \$7 55; heavy, \$7 00 @ \$7 65; light weights, \$6 80 @ \$7 35.

GRAIN AND PRODUCE MARKETS.

Kansas City, March 27, 1898.

In store: Wheat, 1,295,995 bushels; corn, 255,586 bushels; oats, 26,683 bushels, and rye, 15,588 bushels.

WHEAT—Receipts for forty-eight hours, 35,000 bushels. By sample on track, on the basis of the Mississippi river (local 6c per bushel less): No. 2 hard, 5 cars 60 to 62 pounds at 65c, later 2 cars 60 pounds at 64 1/2c, 2 cars 60 1/2 pounds at 61c.

CORN—Receipts forty-eight hours, 43,500 bushels. By sample on track, local: No. 2 mixed, 33 1/2 @ 34c, as to billing; No. 3 mixed, 33 @ 33 1/2c, as to billing; No. 2 white, 35 1/2 @ 36c; No. 3 white, 34 1/2 @ 35c.

OATS—Receipts for forty-eight hours, 14,600 bushels. By sample on track, local: No. 2 mixed, 28 1/2 @ 29c, as to billing; No. 3 mixed, 27 1/2 @ 28c; No. 4 mixed, 26 1/2 @ 27c; No. 2 white, 31 @ 31 1/2c; No. 3 white, 29 1/2 @ 30c; No. 4 white, 28 1/2 @ 29c.

FLAXSEED—Demand fair at old prices. We quote at \$1 08 per bushel upon the basis of pure.

BUTTER—Very little coming in and what arriving finds quick sale. prices firm, Creamery, highest grade separator, 20c; finest gathered cream, 20c; fine fresh, good flavor, 20c; fair to good, 18c.

LIVE POULTRY—Offerings very light and demand was more than sufficient to clean up the market at strong prices.

WHEAT—Receipts, 12,000 bushels; shipments, 7,000 bushels. Market closed 1/2 @ 1/4c higher than Saturday. Cash, No. 2 red 64 1/4; April, 64 1/2c; May, 66 1/2c; July, 68 1/2c.

CORN—Receipts, 278,000 bushels; shipments, 145,000 bushels. Market closed weak. No. 2 mixed, cash, 36 1/2c; April, 37 1/2c; May, 37 1/2c; July, 39 1/2c.

WHEAT—Receipts, 109,000 bushels; shipments, 38,000 bushels. No. 2 spring, at 76 1/2c; No. 3 spring, f o b, 56 @ 61c; No. 2 red, 76 1/2c.

HORSES. AUCTION. Kansas City Stock Yards Horse and Mule Depot. W. S. TOUGH & SON, Managers.

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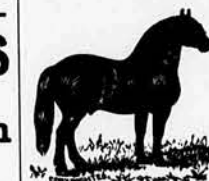
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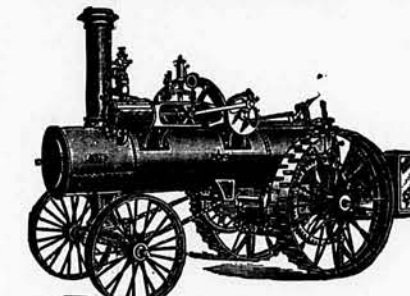
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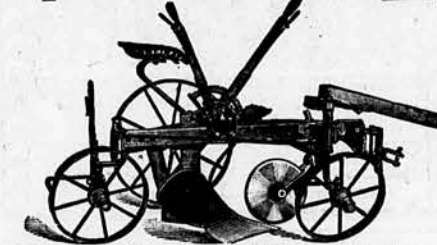
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FOR WEEK ENDING MARCH 22, 1893, Elk county—S. D. Lewis, clerk. HORSE—Taken up by H. A. Bryant, in Longton tp., P. O. Longton, December 30, 1892, one dark brown gelding, weight 850 pounds, no marks or brands; valued at \$30. Barber county—F. A. Lewis, clerk. STEER—Taken up by Bayles Shunste, in Eagle tp., P. O. Sexton, February 14, 1892, one two-year-old red and white speckled steer, branded A on left hip; valued at \$15. Finney county—T. C. Laughlin, clerk. COLT—Taken up by M. W. Shank, P. O. Terryton, March 1, 1893, one bay mare pony colt, star in face, left front foot and right hind foot white, branded bar X. A. on right shoulder, had rope around neck.

FOR WEEK ENDING MARCH 29, 1893. Jackson county—A. E. Crane, clerk. PONY—Taken up by Henry Green, Jr., in Straight Creek tp., P. O. Whiting, March 20, 1893, one sorrel pony mare, medium size, dim brands on left hip and shoulder; valued at \$20. COLT—By same, one dun mare colt, medium size, no marks or brands; valued at \$15. Cherokee county—P. M. Humphrey, clerk. MARE—Taken up by M. A. Leslie, in Lowell tp., on March 6, 1893, one light bay mare, 2 years old; white star in forehead and white right hind foot, valued at \$15.

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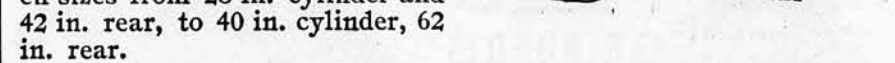
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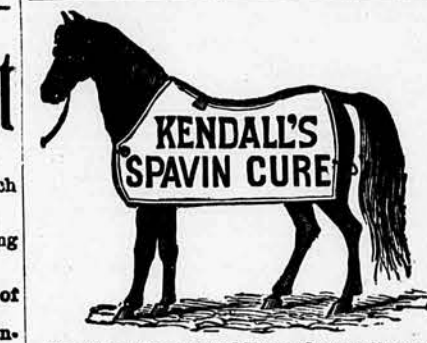
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