

KANSAS FARMER

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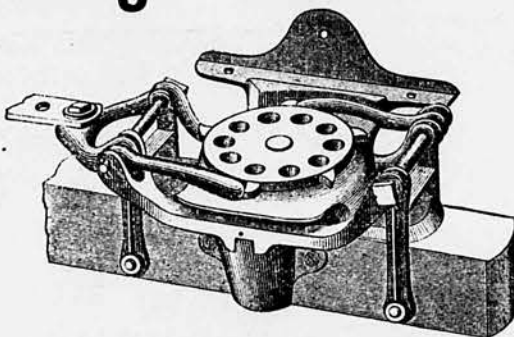


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(Continued on page 20.)

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On and after Tuesday, September 27, 1887, trains will arrive and depart as follows: (Central Standard Time.) All trains run daily.

GOING WEST.

From	Arrive	Depart
From St. Joseph, No. 1.....	12:30 p. m.	12:50 p. m.
From St. Joseph, No. 3.....	11:40 p. m.	11:50 p. m.
From Kansas City, No. 1.....	12:35 p. m.	12:50 p. m.
From Kansas City, No. 3.....	11:35 p. m.	11:50 p. m.
Horton Accom., No. 23.....	7:30 p. m.	

GOING EAST.

For	Arrive	Depart
For St. Joseph, No. 2.....	5:10 p. m.	5:30 p. m.
For St. Joseph, No. 4.....	3:45 a. m.	3:55 a. m.
For Kansas City, No. 2.....	3:10 p. m.	3:15 p. m.
For Kansas City, No. 4.....	3:45 a. m.	4:10 a. m.
Horton Accom., No. 26.....		6:55 a. m.

NOTE.—Passengers for points in Nebraska should take the Horton Accommodation, leaving at 6:55 a. m., connecting at Horton Junction at 10:15 a. m., with the Mail and Express on Northwest lines.

Passengers desiring to take the first train out of the city in the evening, for WICHITA, WELLINGTON, CALDWELL, HUTCHINSON, PRATT and GREENSBURG, should take train No. 3, at 11:50 p. m. New Pullman Sleepers are attached to this train running through to points named. Two hours and thirty-five minutes in advance of other lines—a fact worth remembering. Train No. 2, leaving at 3:30 p. m., has a New Pullman Sleeper attached, running through to Chicago, arriving there at 2:15 p. m., next day.

For Tickets, Sleeping Car Berths, and general information, call at Company's Ticket Office, No. 607 Kansas Avenue, corner Sixth street, and at the Passenger Station, corner Kansas Avenue and First street. City Office Telephone number is 430.

C. W. FISHER, T. J. ANDERSON, JOHN SEBASTIAN,
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Agricultural Matters.

NEEDED IMPROVEMENT IN PRESENT METHODS OF FARMING.

Read before the Wabaunsee Farmers' Institute, December 20, 1887, by W. Marlatt, of Manhattan.

"Times change and we change with them," is as true to day as when uttered by the old heathen philosopher of two thousand years ago. The axiom is just as applicable to agriculture as it is to politics or the religious opinions of the day. That we live in an age of improvement is proven by new modes of farming as well as of travel and transportation. The march of improvement, on all sides, is so rapid and aggressive that the former modes of agriculture, however good in their day, are no longer equal or applicable, to the wants of the present. The methods of the fathers will no longer answer for their sons. Neither will it do to follow after our neighbor, since that which may be best for him, under certain circumstances, may not at all do for you or me.

The present age of agriculture preeminently demands brain as well as brawn,—the head to devise as well as the hand to execute. Where both of these are to be found in one and the same individual the highest measure of success may reasonably be expected. As the several departments of agriculture are diversified and many, one may not be expected to excel in all, or even a large proportion of all. Our environments (to use a new phrase) may be such as to wholly preclude one or many of the leading features of a so-called mixed agriculture. In such case a specialty of one or more of its leading industries may be most successfully followed. One's location, whether a rich or poor soil, whether near to or distant from a good market, must determine, in a great measure, what mode of farming may likely prove best in his case, and lead him to act accordingly.

With low prices of grain and stock, and high prices for labor, one must, to be successful, devise modes to accomplish the most with the least possible outlay of money or muscle. It is here that the wide-awake, inventive genius has the advantage of the slow and plodding dullard.

The new and improved methods needed in order to succeed best in agriculture depend not so much in the possession and use of all the so-called labor-saving machinery as in knowing just how to make the best use of what he may chance to have on hand. The machine is too often found to be a costly investment that sooner or later gobbles up the gross as well as the net earnings of the farm. Nothing so saps one's energies as the consciousness of an indebtedness whose pressing demands he is wholly unable to meet.

Possibly one, if not the greatest improvement just now needed, is to get out, and stay out, of debt. "To pay as you go," was declared by one to be the "philosopher's stone." Earn your money before you spend it is a rule that if faithfully followed will eventually lead to wealth as well as honor, to fortune as well as fame. Above all else, be true to yourself; true to your business; true to your friends; true to your engagements; true to your country; in fine, true to all that is good and great. But, says one, what has all this to do with the present needed improvements in farming? We answer, very much, every way. The true farmer will study to be neat and tidy and thrifty in all his appointments. As far as it lies within him, he will grow good crops, raise good stock, live in a comfortable house, have a well-ordered household, with pleasant surroundings; all of which are far to often needed improvements in our present methods of farming, as many of us very well know. With too many there is an abominable slackness and waste of what kind nature in her bountiful beneficence provides that wholly precludes every possibility of their getting on in the world. And yet, it is just such as these who, with lips stained with tobacco juice, and unkempt hair and beard reeking with the foul odor of a filthy pipe, are forever complaining that fortune never favors them.

On the contrary the coming farmer will be the one who reads and digests what he reads, who forms opinions of his own on all subjects, and especially

such as relate directly to his particular line of industry. He will thus have laid up in mind a repository of facts and experiences to be drawn upon from time to time as the occasion may serve or the exigencies of the case may demand. He will grow his own grain and rear his own stock, and, as far as possible, do all these within and of himself. He will make it a point to sell and not buy; to lay up in store during the "seven years of plenty" against the one season of drought, thereby making the year of failure the most successful of all the eight. All in all, he will so order his affairs, that whether the times be good or bad, his annual accounts will always show up a balance on the right side of the ledger.

But we have doubtless already treated our theme theoretically long enough. We will therefore proceed to speak of it practically. The first and great object in view in farming is to make it pay. In growing grain, and in too many instances, grain only, our lands are fast being robbed of their wonted fertility. They no longer produce as they did twenty or more years ago. Like many of us here to-day who have grown gray in this business, they, as well as we have become tired, and both want and need rest. There is no better way to accomplish both these objects at once than to change our mode of farming gradually from grain to grass. This can be done with comparatively little cost, and no material loss of annual income. With our broad acres seeded down to red clover, orchard grass, timothy, alfalfa and blue grass, all of which take kindly to Kansas soil, the more worn and tired the better, and afford abundant pasturage for carefully-bred hogs, high-grade cattle and well-bred horses, all of which may be made to thrive and grow fat on them, and give the best returns to the owner with the least possible expense or outlay of money in their keeping.

Then again, there is nothing that will pay better for a young man or old man either, than to plant out, and properly care for an orchard of the best standard fruits. The small fruits, so-called, may be made to pay handsomely almost from the very start, while the apple will begin to bear the third or fourth year after planting, meanwhile the ground so occupied may be made to produce other hoed crops, just about as well as though there were no fruit trees growing on it. Thus the actual cost of the orchard up to the time of profitable bearing, will be cut down to a mere trifle, so that at the end of ten years the orchard will not only have paid for itself, but the land on which it was planted as well. After this you may sit under your own vine and apple tree, so to speak, none daring to laugh at, call you a crank, or make you ashamed. For your orchard from that time forth, will, one year with another, fetch you an annual income of \$100 per acre as long as you live. Therefore, we repeat it, plant an orchard, plant in hope and plant largely, and you may rest assured that you will not be disappointed.

We have thus endeavored to present briefly a few of the needed improvements in farming that have been already tried, to some extent at least, and found altogether practical. There are still other modes that might be presented as well. But we trust enough has been said to awaken up in each a spirit of inquiry as to what modes are best adapted to each as he may be circumstanced, trusting we all in our efforts to excel may continually be found provoking one another to love and good works, namely, a love of farming coupled with a firm determination to do it well.

Farmers' Clubs.

EDITOR KANSAS FARMER:—We have a good Farmers' club here, and the editorial in a recent number of the KANSAS FARMER induces me to give the plan.

There are twelve families who are considered as active members. As many honorary members can be elected as desired. Meetings are held the third Saturday in every month during what we may term the winter months. The meetings are held at 10 o'clock, and during the other six months at 2. At the first meeting of the year a president, secretary and treasurer are elected, and an executive committee whose business it is to plan out the meetings for the year, and also what topics are to be discussed. This is all arranged as nearly as possible at the first meeting. Dinner and supper is served by the

members where the meeting is held. No one is expected to bring visitors, but the members at whose house the meeting is to be held have the privilege of inviting as many outsiders as he pleases. This is a good plan, and at the same time gives a chance to bring in such outsiders as the members see fit to invite at some of the meetings.

Select readings, or short speeches are made upon the topic, and a general discussion follows. In this way the experiences of all are given and a considerable amount of benefit derived. A fee of one dollar is charged to each member when joining, and this is used for stationery and postage. This is the largest expense. The one here has been in operation nearly two years. Last year an institute was held by the State board of agriculture, and this year one was held under the auspices of the club; both were a success, quite a number of farmers coming in to attend, taking more or less part.

All the members of the farmer's family are included in the membership, and the ladies enjoy and take part in the meetings. Any member can withdraw at any time, and a new member take the place. So far the applications for membership have been in excess of the vacancies. Much good has been done.

There is no good reason why such a club should not be organized in every neighborhood. The expense is small, and in addition to the benefit secured from the experiences of your brother farmers, an opportunity is offered for social intercourse and enjoyment.

N. J. SHEPHERD.
Eldon, Miller Co., Mo.

Broomcorn Culture—No. 2.

EDITOR KANSAS FARMER:—After the broomcorn is laid by, the shed and machine for cleaning should be looked after. For a crop of any size, and when help is plenty, the double-cylinder machine is best. But for a small crop a single-cylinder does very well. In either case a fast is more desirable than a slow-motion machine. The work can be done more thoroughly and with greater speed, and much less danger to the feeder.

All wooden cylinders should have one good strong iron band around each end. The cylinders should be well balanced, to be safe, and easy running, and should be set in a strong frame, well braced, and the power should be for not less than four horses. Powers that are made for broomcorn machinery, generally are too light for the work to be done. A double-cylinder machine is designed for two feeders. By the side of, and running back and outward from the feeders should be a three by sixteen foot table of a convenient height, upon which the broomcorn, when taken from the wagon should be placed as straight as possible with tops out. By the side of each feeder should be a good quick boy of 15 or 18 years, to arrange in bunches to suit the feeder he is bunching for. The brush should be kept perfectly straight on the table for this boy, and kept near enough so that he will not have to take a step for more brush. He must make all the brush even at the but end by grasping—not too tightly—the bunches about midway and dropping it,—but end down, on the table with sufficient force to bring the but of every stalk to the table at one stroke. It is necessary in some crops to have two, and even a third boy to arrange and straighten for this boy, for each feeder. Everything must be arranged for the convenience of the feeder. His bunches must be of uniform size and placed so he can finish a bunch with one hand, and put it in the box—by his side—and at the same time reach for a new bunch with the other hand. His work should be done without moving a foot. After a little practice it will be found easy enough, and the advantage will be of considerable importance towards advancing of the work. A good deal of brush will go through the machine which must not be left in the seed pile too long or it will heat and become worthless. It should be removed at least four times a day. A seed-carrier on the plan of a straw-carrier—that will elevate the seed into a wagon box is quite a necessary arrangement in large crops. Crooked brush is very tedious to handle at the best. As the day's work progresses pile it to one side, when enough on hand clean and shelve separate from the straight brush.

The box to receive the brush from the feeders should be v shaped two and one-half feet long, from ten to twelve inches deep, closed at one end and open at the other, with the corners rounded. It should be of a convenient height, placed between and immediately behind the feeders, open end next to them with closed end little the lowest. Erect a shade over the men and boys that work about the machine. The drying shed should stand north and south, built with the view of thorough ventilation. Either open ends or alternate boards swung on hinges, if the latter, alternate boards on the sides should be swung also—if the former, nothing more is necessary than that the ends be left open.

My experience has proven that the open ends are much the best, because the brush is not near so likely to heat and mold—more brush can be cured in the same space which—in the case of close shelving, assists very much in preserving the desired color—viz.—bright pea green. The curing process will advance faster and be more even throughout the building, besides the expense of lumber for ends is saved. This idea of open ends may be hooted at by older and wiser heads,—but proof of the pudding, is in tasting it—I have operated both ways, and my loss was less and condition of brush much better coming out of an open shed, than one closed, even if alternate boards on sides—ends, are swung on hinges. Brush properly spread on shelves in an open shed scarcely ever needs any more attention. While in closed sheds it must be thinly spread, and very closely watched for several days. I remember my experience with one season's crop of forty-five tons, thirty of which was cured in an open-end shed, and fifteen in a closed shed—or rather a shed with alternate boards on hinges—the brush in the open shed comes out O. K., while the closed shed come out of an uneven color and considerably damaged for want of proper ventilation. It is true a part of the outside tier of an open shed will damage some, but the interior will cure with so much certainty and uniformity, that the damage counts nothing. I have used different kinds of sheds for drying, but the one most simple in construction and at the same time answered the purpose as well as a more costly one—except for storing broomcorn after baling—was set to poles two feet in the ground, in rows eight feet apart in the rows; one-fourth pitch is steep enough for the roof, and eighteen feet is high enough for center of building.

A. A. COX.
Quincy, Greenwood Co., Kas.

About Raising Beets for Stock.

EDITOR KANSAS FARMER:—Having tried for the first time this year to raise beets for stock-feeding, I have become still more interested in the matter and would like some information upon the question. I am well satisfied from this year's experience with the large, long red wurzel, that beets as a feed crop for hogs or cattle ought to become a part of our regular crop, both on account of quantity and quality, as compared to other field crops. Last spring I concluded to take a little of J. C. H. Swann's advice and try beet-growing, as he said drought and bugs was to be the order generally this year now closing (12 p. m. this night), so planted three-fourths of an acre, by turning dirt back into listed furrow with string plow, harrowed down ridges thus made, then raked them off with garden rake and planted with garden drill; hoed them twice and thinned where needed—(many vacancies of four to eight feet and even more), plowed them three times with corn cultivator, and as a safe estimate, got one hundred bushels of beets, when I only got ten bushels of corn to the acre (and not good either) on each side of my beets; ground just the same, having simply left the corn out of hopper while running furrows for the beets. Now, what I want is, for the editor of the KANSAS FARMER, or some other practical farmer, or farmers, who can speak from experience, or any other reliable authority, to tell the comparative value as near as they can between the sugar beet and other varieties; both as to crop and feeding. I have seen it stated that sugar beets were far preferable for feeding (as to value and choice by hogs and cattle), but nothing said as to comparative yield. Also the best time for planting, mode of cultivation, and any other item of interest pertaining thereto.

W. H. BIDDLE.
Augusta, Butler Co., Kas., Dec. 31, 1887.

The farmer can not well get along without having at least a few cows. He is therefore interested, be it ever so little, in making them pay, and can not afford to shut his eyes to an opportunity of acquiring points on profitable dairy management.

The Stock Interest.

The Farm Horse.

Read before the Seneca Farmers' Institute, by Peter Carmichael.

If I were to try to give a description of the farm horse, to suit every farmer, I would require to know all your different ideas of what that horse is, for I find almost every one has his own idea about that matter; therefore I will not try to describe a horse to suit every one, but tell you what I think is the most profitable farm horse to keep.

In the first place, he must have good size, good flat, broad bones, good sound feet, not too flat or too concave, sloping shoulders to give him action, long rump, good well-defined joints, and full loin, head not too large and well set on a well-arched neck, and a good color, black, bay or brown, although it is said that a good horse never had a bad color. That is about my description of the farm horse.

The next thing is, how are we to breed so as to attain such a horse? In the first place, get as good mares as your circumstances will admit of and breed them to a full-blooded horse, the best within your reach. Do not hesitate for the sake of ten or fifteen dollars, for I am well satisfied that it is better to pay \$20 for a full-blooded horse than to have your mare served by a grade for nothing, even if the grade looks as well as the imported or full-blood horse. You ask my why? I answer: In the grade you know nothing of his progenitors, and every one that has given any attention to the subject knows that there is always a tendency to breed back as we call it; that is, to reproduce their progenitors in the offspring. The next thing you will ask, I suppose, will be, what breed will you use? I answer: There are three draft horses in the country, Percheron, English Shire, and Clydesdale, that you may use to advantage; each one has its advocates, and each has its good points. I am not here in the interests of any particular breed, but to stimulate you to make up your mind, which you will use and stick to it. I believe in breeding in line, so as to preserve the type and make improvement at every step. There has never been and never will be any satisfactory results from cross-breeding. As one of my neighbors remarked to me last summer, "I have been breeding my mares to a running and trotting horse and I get neither one thing nor the other; I am going to quit." "The trotting horse without the trot is a poor piece of property to any farmer. I know there are other excellent breeds that have their advocates. The Cleveland Bay is an excellent horse to breed from if you use judgment in the selection of your mares to couple with him, as these are full of prepotency; their progeny is easily matched and make fine carriage teams that bring good prices. About the Thoroughbred, as he is called, I have nothing to say as I think there are few of Nemaha county farmers foolish enough to breed to a trotting or running horse, as it is a well-known fact that even with the mares and the means and time, only one in twenty makes any money to their breeders. Far too many of our farmers, either through lack of information or of confused ideas of what they require, or from indifference, are too easily satisfied; they use the first stallion that catches their eye, or because he is cheap, and thus lose sight of the qualities that they need for their particular mares, and allow themselves to be argued into the use of a stallion that has not one quality to recommend him for the use to which they expect to put his

get. They never stop to consider the characteristics or propensities of their mares, and even after finding a suitable stallion, they change to another or different breed, quite uncertain of results. Having patronized high-priced stallions in this haphazard fashion, they declare the whole thing a humbug and go back to the scrub, and say he is as good as any. But I tell you, fellow farmers, that the scrub must go, and I have always thought there was some affinity between a farmer and the stock he kept. The scrub will be relegated to the scrub farmer and both go down together.

What Crops to Raise for Cattle Feed.

Synopsis of a paper prepared and read by E. T. Frowe, before the Wabunsee County Farmers' Institute.

That prairie grass is an excellent feed for a short time in the early part of summer, after which it gets tough, and innutritious, and while cattle gain flesh very rapidly for two or three months, they often lose it as fast late in the season. The past season was an exception, owing to late rains that made fall grass unusually good, leaving our stock in a much better condition than they often are at this time of the year. Now the question arises, what feed can we supplement for grass until grass comes again, and that economically? No doubt that a few acres of tame grass pasture would be most excellent, but the difficulty with us is to obtain a pasture of that kind, as we fail to get "a catch" of any of the different varieties of grasses more often than we succeed. But few have tame pastures in this vicinity.

With some, alfalfa fills the bill, with others it will do very well, and still others condemn it entirely. So taking things as they are, I think we can do no better than to cut up plenty of corn, and feed our cattle once a day a ration of the fodder, and prairie hay, straw or millet for balance of feed; if not more than half the corn be taken off the fodder all the better. In fact I am not husking mine off at all this winter, and the cattle are doing well as the result. Whatever else we may have for a variety, can be fed to a profit. I think sorghum an excellent crop for a variety food, and one can obtain a large amount from a small tract of ground, and when grown, if properly secured and rightly handled, it makes a food that all kinds of stock delight in, and one which they eat up clean and thrive on. Yet, I don't think it best to feed exclusive sorghum, but use in connection with prairie hay and it is all O. K.

My way of raising sorghum, and I find it the best, is this: Have rich soil in order, and sow broadcast thereon equal parts of sorghum and German millet seed, at the rate of one bushel per acre, and harrow in lightly. My reason for mixing the seed with millet is that I secure a finer growth than if sown alone. Never sow on poor land for a big crop, as it exhausts the soil in proportion to the amount produced, or in other words, if you take five tons of hay off from an acre in one year, it exhausts the soil as much as one ton each year for five years. The seed should be sown before planting corn, but may be sown any time prior to the last of June. As soon as the millet is ready it should be mowed and let lay until cured, then rake it into windrows with a horse-rake and cock by hand, after which stack as millet, and you have something better than millet and more of it. Should it rain soon after cutting you stand a chance of getting a second crop of clear sorghum, for after being cut off it will sucker out and make a thick growth, and if it don't get far enough along to cut again, it will make excellent fall pasture until interfered

with by frost. I think ensilage made from our fodder crops will be practiced in Kansas before many years, to a great extent, as a matter of economy, for it seems to me to be the thing to supply the lack of tame grass nourishment, and I am told by one who has used it, that one acre of corn planted quite thick and made into ensilage will winter two cows nicely.

Warm Water for Stock in Winter.

The following paragraphs are taken from an excellent communication to the *American Cultivator*, written by Timothy Wheeler, Waterbury Center, Vt.

Stock kept in warm stables require warmer water than if they are kept in cold stables, so that this subject is doubling in importance. A cow kept in a warm stable, and turned out to drink ice-cold water, 32 degrees being a temperature of over 60 degrees lower than that of the system, makes a great contrast, which must give discomfort to the animal, and loss to its owner. The profits of farming are so small that it becomes necessary that all leaks should be looked after, even the small ones, and especially the larger ones, like the one under discussion.

In the reading of five agricultural papers, and in conversing with many farmers, I find all are unanimous in the opinion that our stock should be provided with tepid water or warm water, but the degree of temperature to which it should be raised becomes a question upon which the writers do not agree, though none seem to know, or are positive, varying in their opinions from 50 degrees to 113 degrees. An average opinion seems to be from 60 degrees to 80 degrees. It is also believed by all, that in warming the water a saving is made in the feed if nothing more. Nearly all believe there is a saving in flesh, milk and the manure-pile, in addition to the feed.

I have seen but one estimate of the value of feed saved daily per cow, and that was eight cents, which would amount to over two millions of dollars to the State of Vermont yearly, a sum worth saving; and this sum, be it remembered, is net gain, after the expense of warming the water is taken out. One writer says that he drew all the water that forty cows drank for one winter one mile from a spring, rather than to have them drink from a river near by, and he thought it paid him well.

The result of an experiment at an agricultural school in France showed an increase in milk of one-third, the water being warmed to 113 degrees. Other parties claim an increase of from 20 to 30 per cent. At the Agricultural college in Kansas, an experiment resulted in the increase of milk 84 per cent., the water being warmed to 65 degrees. Another experiment in France showed an increase in milk of three pints daily per cow by warming the water instead of using pump water.

Prof. J. P. Roberts, of Cornell University, says: "The water consumed by two sets of cows, containing three animals each, was weighed for a period of thirteen days. One set drank an average of 110 pounds of cold water each day per cow, and the other set an average of 120 pounds of warm water per cow, and the other set an average of 120 pounds per cow each day." I have another statement that cows will drink one-third more when the water is warmed to 80 degrees than they will at 32 degrees, and that the milk will increase one-fifth to one-fourth and without deterioration. Another statement: "A cow that makes six pounds of butter a week on cold water will make seven pounds if the water is warmed." As milk is from 80 to 90 per cent. water, it is well to look after the quantity, quality and temperature of the water consumed.

Comments on Cattle Sales.

EDITOR KANSAS FARMER:—In Major Sims' essay at the breeders' meeting, he was speaking of there being so many poor steers in the vicinity of Topeka. It is some consolation to know that the whole State is not in the same condition. Having been a resident of Kansas for fifteen years, your correspondent has watched the results of sales of fine stock all over our State, and has given Topeka as one of the poorest places in the State for holding a public sale of fine cattle.

In the year 1873, I think, Mr. Vanhorn, that had a sale of Short-horn cattle at Topeka, and had to almost give them away. Mr. Hensley sold his show herd at this place with but little better results. In November, '82, Messrs. Harper and Ficklin, of Owensburg, Kentucky, sold forty head of good cattle at a loss of over seven hundred dollars. In '84 Mr. Guild and Mr. Walmire made a sale of forty head of cattle, and this proved to be the worst sale of the whole lot. They had to stop the sale as the animals were selling so very low, yet there were some extra good cattle among them.

Mr. Lee, last June, sold a draft from his herd with very poor success; Mr. McCaslin sold his entire herd last August, some of which he paid good prices for, and I am told they did not sell for a fourth of what they cost him. Mr. McAfee sold a draft from his herd last April; but there were some good buyers present from a distance and his cattle sold fairly well.

No wonder they are selling off their fine stock in a place where they are so poorly appreciated, and have moved their Short-horn meetings to Manhattan, where Short-horns are appreciated, for the writer has attended sales at both places and knows whereof he speaks. A. FARMER.

Stock Notes.

In times of ice and sleet, when the roads are slippery, use frost nails, renewed as often as necessary, and you will have no trouble from slipping.

A shrewd judge can see in the calf, especially if he sees also its parents, and still more surely if he knew its further progenitors, the character of the animal in most, if not all, stages of its life.

If the horse is warm when brought in, sponge out his mouth with cool water, and rub him down briskly with wisps of straw until he is dry, and walk him around if he is very warm, to cool off gradually.

Large breeds of sheep require good pasturage. They will pay only when the conditions are favorable. Uneven pastures, coarse grass and "pickings" will not do for them. They must be supplied with all they may require.

Sheep not in the best condition for breeding should be got rid of without delay. Distemper, foot-rot, and other difficulties in a flock cause too much labor. Only the healthy ewes should be retained. All others, unless nearly well, should be destroyed.

The following table shows the growth of the wool industry in the United States:

Year.	No. sheep.	No. lbs. wool.
1810.....	1,000,000	13,000,000
1812.....	1,500,000	21,000,000
1813.....	17,000,000	29,000,000
1840.....	10,000,000	35,000,000
1850.....	21,723,220	82,516,956
1860.....	22,471,275	81,511,313
1870.....	28,477,951	101,102,357
1880.....	41,708,000	240,001,000
1884.....	50,626,628	304,000,000
1885.....	50,380,243	303,000,000
1886.....	48,322,311	293,000,000
1887.....	44,559,314	283,000,000

The state of the weather and the time of year must regulate the first few weeks of calving. The general principle is as much out-of-door life as circumstances will permit. Of course in the very inclement weather of mid-winter entire confinement is generally necessary until from two to six weeks old. But even in cold winter weather, beginning with an hour or two, it is a wise plan to early habituate calves to cold. It is well to be careful how this is done, and in January it is advisable to look out for frost-bites.

In the Dairy.

CHEESE--BUTTER--MILK.

Some days ago a letter of inquiry was received at this office concerning certain important dairy matters, and it was referred to a practical dairyman for complete answer. Below the answers are printed:

EDITOR KANSAS FARMER:—I am in receipt of your communication containing letter from "W. W. W.," Hunnewell, Kansas, making inquiries respecting cheese-making. I take pleasure in giving through the columns of the FARMER what information I can on the subject.

Question 1.—Does the amount of cheese vary as much as butter to the number of pounds of milk, in the different seasons of the year?

Milk, in its variability, as noticed in the different seasons of the year, is caused to a large degree by the nature of the food upon which the cows are fed. Also by the surroundings, etc., of the dairy.

For instance, if cows are fed on prairie grass exclusively, of a poor, dry quality, during the hot months of summer, with a scant supply of water, the milk they yield will vary very much, and the proportion of butter fat will be small in quantity and poor in quality, no matter how well the milk may be managed while passing through the dairy. On the other hand, cows may be fed a fair quantity of nutritious food in addition to the grass they can get, but if the milk is not kept at the right temperature, and also the greatest care exercised with regard to cleanliness, the yield of butter will be both small and poor.

Good milk from the average dairy cattle of Kansas, during the months of May, June, July and August, should yield 4 per cent. of butter, or about one pound of butter to every three gallons of milk. I am acquainted with one creamery where they use a centrifugal separator, and the yield was three and three-fourths pounds to the one hundred pounds of milk. The cattle I handled last summer produced a little over four and a half pounds to the one hundred pounds of milk. They were on a poor weedy pasture, but had a liberal supply of bran, and occasionally a little corn-chop. The milk was set in ordinary three-gallon tin pails with covers, the pails placed in running water at about 54 to 55 degrees. The amount of butter would probably have been larger if the setting had been done in cans that could be thoroughly submerged in water, at not over 46 degrees.

I bought some milk from neighbors, where the cows had a much better pasture but were not fed anything else, and the yield of butter from this milk did not exceed three pounds to the one hundred pounds of milk. The quality of milk, for both cheese and butter-making is affected materially by the kind and quality of food consumed in its production. Where prairie grass is the chief green food, it appears essential that food also of a highly concentrated nature should be given. I do not think, however, that this is the case when clover, blue grass or green corn-fodder is used.

Good summer milk should contain 13 per cent. of solid matter, in the following proportions: Four per cent. butter fat, 6 per cent. caseine (curd matter), 3 per cent. sugar, etc.,—the latter being in a soluble condition, after the cheese and butter have been extracted passes off in the whey, or as when butter only is made, is fed to the stock, say pigs, calves, or poultry, together with the cheese matter in the skimmed milk.

I have continued to feed bran, corn-chops and flaxseed meal, in such quantities as I deemed best, according to

varying circumstances (and my ability to purchase the same), and throughout the fall and the first month of winter, the yield of butter has been from 5½ to 6 per cent. I have not made any cheese, but have no doubt that the milk contained at least one pound to the gallon.

September and October are equally as good months for cheese as for butter-making. I have often seen Canadian and American cheese on the Liverpool market, made during these months, in as good condition the following June as when first landed; in fact these are the cheeses of commerce most sought after, on account of their superior keeping qualities and general excellence.

Question 2.—What amount of cheese will the amount of milk make that it takes to make a pound of butter, at the same season of the year?

In giving a general answer to this question, I would say about two and a half pounds of cheese can be made from the same amount of milk that will be required to make one pound of butter. But, as in answer to the former question, I would again remind your readers that much will depend upon the feeding of cattle and the general management of milk, in cheese-making, as well as in butter-making.

A much larger quantity of "shop-made early-ripening cheese" can be made from the same quantity of milk than can be produced if the maker is desirous to get cheese "rich in meat, clean in flavor, firm in texture," and that will not mature under six months and keep good for a year after maturity. This quality of cheese is made at a much higher temperature than the former, is subjected to considerable pressure under the whey, is as free as possible from any kind of acidity, and being much heavier salted, does not contain the same amount of whey matter in either a cured or uncured state.

Question 3.—Is a cheese considered a full-cream cheese when the night's milk is skimmed next morning and added to the new morning's milk?

This will depend entirely, in the first place, upon who it is that makes the cheese, and in the second place upon who it is that judges it after it is made.

In the hands of a competent, experienced maker, such milk may be converted into cheese that will pass for "full-cream" with nine-tenths of the consumers. On the other hand, you may give the new morning's milk, together with the cream from that of the previous evening, into the hands of an incompetent or inexperienced maker and he will probably produce therefrom cheese that will not pass for "full-cream."

A "full-cream cheese," however, in the strict sense of the term, is one that is made from milk which contained the whole of the cream.

I have not time in this letter to notice anything in regard to the mixing of milk, or the different temperatures of setting together for the various qualities of cheese that are made, but will give what information I can on the subject to any of your readers who may wish to go into the business.

Question 4.—Can the whey be drawn off by means of a faucet in the bottom of the boiler, or has it to be dipped off?

This will depend upon the construction of cheese vat, of which there are several varieties.

I may add, for the information and encouragement of those farmers who wish to commence cheese-making without incurring too much expense for an outfit, that I have seen the finest quality of cheese made in a tub about twice the size of an ordinary wash-tub, and in some cases the whey was dipped off the curd, and in others it was drawn off by means of a syphon, which, of course, is less trouble than dipping.

All that you absolutely require is a

good hard-wood or tin-lined vessel, large enough to hold the milk you wish to handle for making one cheese; but I do not wish any one to infer from what I have written that I am inclined to disparage the great improvements made in dairy apparatus during the past twenty years. On the other hand, I welcome every improvement, and in this respect there is no country in advance of the United States. To all who can afford to buy one, I would strongly recommend the use of some one of the vacuum vats, as preferable to any other kind of vessel for cheese-making, as by this means the milk can be cooled or heated to the desired temperature, and all the work of making can be done in and over the maker; it is clean, compact and convenient; is a milk house and cheese-maker combined, the smaller sizes being pre-eminently adapted to the farm dairy.

Question 5.—Can the whey be used for feeding, or is it any account for calves?

The whey, as I have already observed, contains sugar and other properties good for feeding purposes. Of course the quality and condition of the whey will be largely influenced by the food given to the cattle.

I would not recommend the feeding of green whey in large quantities to young calves, especially when the pastures are flush, or directly after rains.

Whey, as it comes off the curd, is very relaxing in its tendency, and must be used judiciously. This may be obviated to some extent if the whey is scalded and poured over some kind of food more healing and binding in its nature. I cannot lay down any hard and fast rule for the feeding of calves. All who engage in this business must be guided by their own judgment and experience, and must take into account that calves, like men and women, differ in their physical organization, and are materially influenced by surrounding circumstances. In short, what is good, nourishing food for one calf will kill another in the same pen.

Whey is of great value in the raising of young pigs. In fact, I believe that pigs of all sizes will do better if supplied with a moderate quantity of dairy slop; especially is this so if the corn consumed is ground instead of being fed in the ear, and the whey, etc., mixed with it.

With regard to the press, I would recommend one of the ordinary screw presses, which are affixed to a bench with a strong wood cross-tree. I think that the iron-work will cost about \$2.50 at any of the makers of dairy apparatus.

Your correspondent will have to ask some one else about "tall meadow oat grass," as I have had no experience in this direction. As a general rule, I may say that tame grasses are preferable for general dairy purposes, and will repay for the trouble of cultivation.

In conclusion, permit me to remind "W. W. W." and all other dairy farmers who may read this, that there is a wide unoccupied field in Kansas that may be profitably devoted to the cheese-making branch of dairy farming. At least three-fourths of the cheese consumed in the State is purchased from other States, and all that is needed is to organize and equip suitable premises for the business, so that we may convert a part of the milk into cheese, which is now made into butter, and often sold at 10 cents per pound, or, more strictly speaking, is bartered to the country merchants on that basis; whereas the cheese will average at least that price, wholesale, and as high as 12 or 14 cents, if made in sizes suitable for hotels and private families, besides making from the milk nearly three times the quantity of cheese as compared with the butter that could be

obtained. And, further, I may observe, that we shall by so doing enhance the value of that portion of the milk which is used for making butter, as we shall thus reduce the glut of butter which occurs every summer, and receive a better price in consequence for that which we have to sell. And finally, whatever we receive for cheese may be counted as so much extra profits to the dairy enterprise of the State, as it will be that amount added to the aggregate income of the farmers, which at the present time is a very desirable result.

Another phase of this cheese-making business which should commend it to the favorable consideration of all dairy farmers, is the fact that cheese, when well made, can be kept on hand to await a better market, and will improve while being thus kept. It can also be shipped to foreign markets and is improved by the voyage, which is not the case with butter, as I have often seen the latter when taken from the hold of the vessel in a foreign port not worth more than the cheese that came with it.

Hoping that Kansas may yet come to the front as a dairy State, I remain,

Yours, R. L. WRIGHT.
Topeka, Kas.

What "Peculiar" Means.

Applied to Hood's Sarsaparilla, the word Peculiar is of great importance. It means that Hood's Sarsaparilla is different from other preparations in many vital points, which makes it a thoroughly honest and reliable medicine. It is peculiar, in a strictly medicinal sense; *first*, in the combination of remedial agents used; *second*, in the proportion in which they are prepared; *third*, in the process by which the active curative properties of the medicine are secured. Study these points well. They mean volumes. They make Hood's Sarsaparilla Peculiar in its curative powers, as it accomplishes wonderful cures hitherto unknown, and which give to Hood's Sarsaparilla a clear right to the title of "The greatest blood purifier ever discovered."

The school officials of Boston have posted notices in all the school buildings of that city forbidding the chewing of tobacco by the pupils. They have even posted the notice in the girls' high school building, much to the indignation of the young women.

Consumption Cured.

An old physician, retired from practice, having had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellows. Actuated by this motive and a desire to relieve human suffering, I will send free of charge, to all who desire it, this recipe, in German, French or English, with full directions for preparing and using. Sent by mail, by addressing with stamp, naming this paper, W. A. NOYES, 149 Power's Block, Rochester, N.Y.

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Color.**

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IN STRENGTH
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NEVER TURNS RANCID.

Always gives a bright natural color, and will not color the Buttermilk.

Used by thousands of the best Creameries and Dairies. Do not allow your dealer to convince you that some other kind is just as good. Tell him the BEST is what you want, and you must have Wells, Richardson & Co's Improved Butter Color.

Three sizes, 25c, 50c, \$1.00. For sale everywhere.
WELLS, RICHARDSON & CO.
BURLINGTON, VT.

Correspondence.

Trusts, Syndicates, Etc.

EDITOR KANSAS FARMER:—"Does the protective tariff promote these combinations?" I am surprised to see the editor answer this question by an unqualified no, made still more emphatic by repeating it. (See FARMER of Dec. 15th, page 7.) No one will deny that avarice is the first cause. "The love of money is the root of all evil." Yet there are other causes that make it possible for avarice to accomplish its unrighteous ends. The greater the number of persons that are engaged in producing a certain article, the greater is the competition, and the more difficult it will be to combine and put up prices. The FARMER itself has already asserted this fact by showing the difficulty of the farmers combining on account of their great number and isolation. We hear of some organizations of farmers; but what proportion of the farmers do they represent? For instance the National Wool-growers' Association mentioned in the same issue of the FARMER, if closely examined, will show but a small proportion of the wool growers, and still less of the tillers of the soil.

The fact is, a large number of farmers have a few sheep and they exchange their wool for clothing, and are not caring for the prices of the wool, provided the goods correspond in price. These do not keep authorized agents at Washington to look after legislation.

But to return to the first question. I asserted that a large number can not so easily combine to raise prices. For instance, it is easier for the sugar refiners and glass manufacturers of the United States (as spoken of in the FARMER of Nov. 10th, p. 11) to combine, than for all such manufacturers in the whole world to combine. Therefore, when the protective tariff shuts out these foreign competitors, it promotes these combinations; and no amount of prejudice should prevent us from seeing this fact. If American salt is cheaper than foreign, as you say, then combination can raise it to that price and as much higher as our government sees fit to protect it by tariff. Do you see?

I am willing to believe that many and perhaps most of our advocates of a protective tariff desire to aid honest labor in our country by the tariff. Yet it behooves them to look carefully and impartially if they can. If the greater benefit accrue to oppressive monopolies, then it certainly is not what is wanted. If a fort that is intended for our protection falls into the hands of the enemy, then we try to destroy it if we cannot drive the enemy out. In like manner as greedy monopolists are combining against the people, who aided them by protection in the past, and are denying us the home competition which the tariff was intended to build up, and are unwilling to allow a fair share of their profits to the laborer, we can no longer regard the present tariff as a fort of defence for the people, but as one of the strongholds of avarice, and hence we must destroy it or modify it so that avarice cannot intrench itself in it to the detriment of the general good.

On the editor's page of the FARMER of December 8, a "farmers' syndicate," or at least a "farmers' trust" in every township is suggested. But there are serious objections to that plan as the farmer's remedy. 1. So many legitimate combinations in other trades have degenerated into self-aggrandizing conspiracies against the common good. This may do so too. 2. We should not do what we condemn in others. In every neighborhood where good-will exists the legitimate co-operation, such as rushing grain or stock to market, raising buildings, thrashing, etc., can and is accomplished without such syndicate. 3. It would destroy the independence of our farming population, which is at present to themselves and the country an inestimable blessing. If they "work for the company under one central management" they become mere drudges, instead of intelligent farmers and workers developing body and mind by work and thought. When a man plans and does his own work it is done best, as a rule. 4. It would create dissatisfaction, because persons would want things managed differently. The careless neglect to return the tools owned in common, neglect to return to custodian promptly, so others would have

to wait for the use of implements, and bear the loss of the former's neglect. The careful and prompt farmer would be the loser; such is human nature. 5. If there is a central management there must at times be funds in the hands of heads thereof. Then we would see some sudden immigration to Canada to do company to the many bank cashiers, insurance managers, and other central heads of organized business that is getting so common to the shame of our country.

The subject is indeed a serious one. The application of "The People's Dead Line," spoken of in FARMER of November 10, also has its difficulties. The only way to make that effectual and practical would be to have the line clearly drawn. And how is this possible unless it forbid all combination to raise prices? Although it is good and proper to combine for mutual improvement and assistance, the moment it is applied to regulating prices, the selfish nature of man will make it impossible to distinguish a just limit if he is allowed or enabled to fix the price of his own production. If the consumer of such productions were allowed to fix the price the same selfish motives rule in him. The only way to approach a just price is to leave the law of supply and demand to regulate it. If it is possible by any means to prevent all combination for raising prices above the natural level and also to prevent combination for depressing prices below the natural level, then something can be done. Then we may have honest competition. A combination of grain buyers or pork buyers to keep down prices is equally as unjust as a combination to keep up or raise prices. And when railroads combine with other combinations and try to force prices up or down it is still more unjust. A few years ago we had a sample of it when railroads refused to haul grain unless it went through the elevator. Let these questions be agitated until they are understood in all their bearings, and we certainly shall be able to provide an effectual remedy to existing evils and a preventive against others that are just accumulating. H. F. MELLENBURCH.

Some Tariff Suggestions.

EDITOR KANSAS FARMER:—President Cleveland did a wise thing when in his message he gave special prominence to wool as an article on which the tariff should be reduced. I suspect he builded better than he knew. The intelligent voter will get a more correct idea of the principle of protection from the discussion of its effects on wool-growing than from any other source, because he is more familiar with that industry than with any other that is protected. Wool is produced in every State and Territory, and wool-growers are not as a rule millionaire corporations given to ways that are dark and tricks that are vain. Therefore, when flocks are butchered and their owners seek other employment, it is a plain case—wool-growing is not profitable.

The facts in the case are these: Under a high tariff, sheep men prospered and contributed to the prosperity of the country in general. When the tariff was reduced, wool became unprofitable and growers went into other agricultural employments already over-producing. Then, but little revenue was collected from wool—about \$1,700 per annum; now, more than \$5,000,000 are collected annually.

The questions naturally arise: First—Is the price of wool exorbitant? Second—Can wool be produced at a fair price in this country? Third—Is the industry of sufficient importance to justify protection? These questions apply to all articles demanding protection.

In answer to the first, I will say the prices of all articles mentioned in this discussion in the FARMER are low enough, are reasonable, as has been previously demonstrated. In answer to No. 2, we have plenty of grass, plenty of grain to grow wool, and also facilities for carrying on the other branches of industry demanding protection. No. 3—It is very important at this time that every practicable branch of industry be maintained to give employment to our people and to create, develop and maintain a home market for our products. Of course some one will object that our people are not fully employed at present. I will ask such, will more of our people find work when under a reduced tariff more of our goods are imported and less produced at home? There

are more points than the tariff to consider when dealing with the labor question. It is argued that protection benefits only the employer and does not increase wages. Protection maintains the price of the product, thus making it possible for the employer to pay high wages. Whether he does or not is not a tariff question. One thing is certain: Reducing the employer's profits will not tend to increase the employee's wages.

One correspondent fails to recognize any benefit to be derived from a home market. My ideal is a market where I can sell turnips, sweet potatoes, fresh fruits, etc. These things can be produced profitably where a market can be found, while corn and wheat can be produced only by slave labor except by capitalists in large quantities. Erect a sugar factory at Deerfield, and I and my neighbors will thrive in spite of hot winds, raising sorghum that we can't ship to Fort Scott, let alone to "Lunnun."

It seems to me the way out of the tariff muddle is so plain that the honest voter, though a Jacksonian Democrat, can not err therein. What is the matter with this mode of treatment? Reduce the revenue to proper proportions by raising the tariff on wool and on other imports competing with home industries; by removing the tariff from sugar and paying a bounty to home manufacturers of same, and by giving substantial encouragement to our ship-builders? Since Perry's victory, I'm proud of our seamen and don't want the craft to become extinct or to be reduced to a state of innocuous desuetude.

E. F. K.

Pay the Soldier Before Reducing the Revenue.

EDITOR KANSAS FARMER:—I see by several recent issues of the FARMER, that you are in favor of a reduction of tariffs, especially on sugar and tobacco, and that lumber be placed on the free list. Please permit me to inquire, if it is a settled fact that the manufacture of sugar in the United States, and especially in Kansas, will prove remunerative in a reasonable degree, in case duty on imported sugar is discontinued. For I am as much in favor of a reduction in taxes of every kind as yourself or any one else, provided it can be done and leave the government to say to all mankind, truthfully, that she has met all her obligations, and paid all the debts she owes, both at home and abroad; and that her revenues are still ample to defray all necessary running expenses of the government and some to spare. I am well convinced that we have an honorable class of citizens, who claim that the general government has not paid them as per contract as to actual value of money, nor as to amount paid to each creditor for similar service rendered, and they demand an emphatic answer in the near future as to whether they are to receive what is due them or not. I refer to the men who rescued the country from total ruin, who as soldiers, were mustered into the army under a law that promised them pay in money that was worth one hundred cents on the dollar. They have never received it. They were also promised equal bounties for equal services rendered. This has, on one occasion been denied them, by the veto of a single man. They were also promised that in case of disability either from disease or wounds, they should be pensioned. In part, this latter promise has been complied with, but in part only; for tens of thousands of them are inmates of almshouses and county poor houses, and are dying in these places and are being buried in potters' fields. This is not due to a desire upon the part of the masses of our people, but is due to a most shameful neglect upon the part of our lawmakers, both state and national. The people are perfectly willing as a mass to discharge these obligations without delay. The only real opposition to all this is found among the soldier-hating persons of the country, and the money sharks, who are opposed to the government paying any of her debts, except what interest she owes them, on bonds they obtained largely through depreciating the money that paid the soldier, and but for this class would have paid them very nearly in full.

The soldiers are willing to pay these men all they have been promised by the government, and ask the government to use them likewise; and then, and not until then, shall I be in favor of a reduction of tariffs. To say that the government is not able to pay what she owes her soldiers, but is able to

pay her bondholders all they have ever asked; and hundreds of millions that was never due them, in strict justice, is getting quite thin in presence of the fact that the vast sum of money in our national treasury has been derived principally from luxuries, a large share of which comes from imported articles at that.

Until this government deals justly with her soldiers by way of paying them all she ever promised them, and by enacting such laws as will keep every man of them out of county poor houses, I shall oppose a reduction of revenues on all luxuries. \$100,000,000 per annum will pay every man of the war of the Rebellion now living a pension of \$8 per month. Our income from revenues the last year was over \$300,000,000, leaving a large surplus in the treasury after all her expenses were paid for the year.

Now, Mr. Editor, there is nothing more political about this article than there is in your own articles touching the tariff question. I have made no attack upon any party, but charge the shameful neglect to which I have called attention, to those unfriendly to our country, and to the money sharks of all political parties.

G. BOHRER,

Late of Co. D, 34th Ind. Vol's.

Sorghum and Oats for Feed.

EDITOR KANSAS FARMER:—The past season of 1887 I gave the mixed-oats-and-sorghum-for-hay a trial. Owing to the drouth of July, the second crop of sorghum alone was nearly a failure. This method for three or four previous years was very successful in one of our western counties, where it has given the most gratifying results as to cost of production, and the immense amount of feed, especially valuable for young growing stock. While the yield of oats was only thirty bushels per acre, the excellence of the oat straw and sorghum amply repays me for the cost of seed and extra drilling in of the sorghum seed. Two seedings, one of two bushels of oats and one of one bushel of sorghum seed per acre was drilled in about March 20; this double drilling was done to insure an equal distribution of each kind of seed, as experiments demonstrated that the drill—a force feed "Hoosier Press"—would not feed it regularly, as the sorghum seed settled below the oats and fed out first. The oats were ripe July 1, the sorghum being very near as tall; cut and cured in shock for nearly three weeks, when it was put up in small stacks. The cutting of the second crop will be some time the second week in August, when a growth of some four feet of fine stalked and bladed sorghum is secured. Cured on the hot soil and remaining oat stubble, it is more thoroughly cured than earlier in the season. This all-sorghum hay will be best stacked in small hand stacks of one ton each on the ground where grown. Large stacks are liable to mold and fermentation set in during a thaw after severe winter weather. J. N.

Kellogg, Cowley Co., Kas.

Gossip About Stock.

Breeders of Holstein-Friesian cattle having animals to be recorded in Volume III of the Herd Book should send their applications at once to the Secretary, Thos. B. Wales, Iowa City, Iowa. The blanks are furnished free by the Secretary.

Readers of this paper are invited to confer with our advertisers, who are representative business men deserving the patronage of those who need anything in their line. It is always advantageous to mention KANSAS FARMER every time you write.

R. J. Blackledge, Salina, Kansas, breeder of Clyde and French Draft horses, reports he has just sold a fine Clyde stallion to some of his Barton county neighbors, also reports the prospect good for selling a number of stallions between this and spring.

Dehorning cattle is becoming quite general throughout the State, and the result is reported quite satisfactory. The subject was thoroughly discussed through these columns last winter advocating the idea. Further facts from the experienced will be appreciated by readers of the KANSAS FARMER.

This week the publishers of the KANSAS FARMER had to print six thousand extra copies of the paper to meet the demands of our customers. Breeders should take the hint and have their cards permanently located in our columns. No weekly in the West prints so many extra copies as this paper or has so many paying subscribers. The fact is evident that no farm paper in America gives so much of value to its readers and advertisers in return for their money as the KANSAS FARMER. The enterprising people of the West realize this and are rapidly falling into line as worthy patrons of the "old reliable" KANSAS FARMER.

A SPECIMEN OF KANSAS PLUCK.

It is now nearly twenty years since George W. Crane and his partner, with a hand or two, opened a little job printing office in Topeka for the purpose, among other things, of preparing and printing blanks and blank books to be used in legal proceedings, by Clerks, Sheriffs, and other court officers, Probate Judges and Justices of the peace, persons in private and municipal business, lawyers, abstractors, bankers, railroad men, real estate, loan and insurance agents, officers of the State, of counties, townships, cities, school and road districts. By following closely the line originally determined; by industry, temperance, hard, steady work on his own part; by employing only competent workmen, paying them good wages and retaining them continuously in his employ; by engaging the best legal talent to prepare the blank forms he adopted; by using none but the best materials and turning out first-class work always; by judicious and persistent advertising; by promptness and punctuality in filling orders; by watchful attention to details; and by honorable dealing with his customers, his business grew steadily until it included the printing of all manner of books used by lawyers, judges, court officers, and persons in official places, such as lawyers' briefs, court dockets, compilations of laws relating to particular matters, as roads, schools, townships, and to particular branches of law practice before Justices of the Peace and the higher courts, volumes of special laws, of the general statutes, digests of laws and court decisions, and finally to the printing and binding of law books generally, and miscellaneous books, and the making of all necessary conveniences for reference to books and papers and for their preservation, such as index books, stub books, perforated sheets bound and loose, special binding devices, files, covers, etc., in short, everything in the line of classified stationery, printed, ruled, perforated, stitched, bound or loose, and devices needful or convenient in all kinds of private and public business, from a promissory note book to a double-ruled ledger, together with law and miscellaneous books in general.

The business now has a plant worth \$125,000, and the trade amounts to upward of \$350,000 annually. It is the largest establishment of the kind in the country west of St. Louis. Paper and other materials are purchased and stored by carloads; fourteen printing presses are used, and one hundred and fifty persons, experienced in their several departments, are employed, occupying a floor space equal to three-fourths of an acre in a magnificent five-story building, 50x135 feet, erected specially for this particular business. The pay-roll foots up \$2,000 and more weekly. The trade long ago spread beyond the boundaries of Kansas and now extends as far west and northwest as California and Washington, going south through New Mexico and Arizona to Mexico, and to Texas and other States south as far as Florida.

The secret of Mr. Crane's success lies chiefly in the character of his work and his promptness in filling orders. He never sent out a blank form that was not legally correct in phraseology and statement, or that was not neatly printed on good paper; he never sent out a book that was not strong and substantially bound; his work always gave satisfaction, and he got it out as fast as good workmen could do it and do it well. Crane's blanks were safely relied upon in law practice, and his books ranked among the best made in the country, as their wide distribution proves. Although twice burned out, he never lost courage, he never slighted a job—he and his business both deservedly grew stronger and better.

The new Crane building, thrown open to the public last week, is a splendid edifice facing Kansas avenue, rising seventy-five feet above the basement—a massive front of stone and glass with great arched windows, presenting a beautiful spectacle at night when all the rooms are illuminated, as they were during the opening nights. The floors are dedicated to avoid noise, every story is a room and devoted to a particular branch of the business. The stereotyping, planing, shaving, grinding, box-making, and all the rougher work is done in the basement; the first floor is the salesroom, where samples of stock are kept and most of the finished work—immense masses of books, blanks and other work—where packages are done

up for delivery or shipment, and where the superintendent, with his assistants, shorthand writers, clerks and accountants have their places and desks; the second floor is the bindery with a wonderful variety of machinery, complete in every detail; all run by electrical power; the third floor is the stock room where tons and tons of paper and binding material is arranged in long piles with a ponderous paper cutter near to adjust shapes and sizes of sheets and pieces; the fourth floor has a fifteen-foot ceiling, is lighted front, rear, side and top, airy and comfortable, and is occupied by four or five dozen printers who do all the type-setting for the entire business; the fifth floor, next the roof, with its sky-lights, is used for storing such things as are not regularly in use, and such as are to be kept for reference only in case of need, as extra tools, old papers, accounts, invoices, books, etc., all of which are carefully indexed in books kept in the office below.

The presswork is done in a long room in an adjoining building constructed specially for that kind of work, nine of the fourteen presses being large cylinder machines resting on solid masonry, all driven by an electric motor occupying space about equal to that of a flour barrel.

The principal office, where orders and all original papers are first examined, and from whence instructions are first issued, is immediately in front of the press room, and here may be seen, almost any minute during working hours, the head of the business—modest, quiet and unassuming, as he was, when twenty years ago he worked with sleeves rolled at the case or press, or binder's table, Mr. Crane, himself.

The whole building, with its annexes, is heated by steam from two large underground boilers; every room is provided with water pipes for use in case of fire, with alarm bells and police communications, with water closets and sinks, with electric lamps for use at night, and a large, strong, hydraulic elevator, for carrying freight and passengers, plies continually from floor to floor, making communication practically instantaneous. Every room and every department of the business is connected by call bells and pneumatic tubes with the main office.

Vast as the business is and intricate, involving as it does, a great many details, it is all so perfectly systematized that it works like a colossal machine—every part doing its own particular work.

Mr. E. Kimber is general superintendent, and has grown up with the business, having been with the house continuously for seventeen years.

D. O. Crane is cashier; Frank Crane assistant cashier; W. J. Staggs bookkeeper.

J. H. Oden is superintendent of printing, having for assistants, T. P. Holcraft, foreman of book work; Willis Coates, foreman of job work; A. G. Carruth, proof-reader; W. H. Casey, foreman of press room, and C. W. Eberhard, foreman of stereotype and electrotype foundry.

J. W. Bloomfield has been for sixteen years foreman of the bindery, and is assisted by John P. Marlon, head ruler; Geo. L. Kramer, head finisher; Mr. Elston, head forwarder, and Miss Josie Bailly has charge of the lady employees.

Mr. D. S. Pipes is superintendent of the law book department, and Mr. A. S. Hulling, the stenographer, has charge of the correspondence.

This is the record of a business to be proud of, not only by the gentleman, immediately concerned, but by the people of Topeka—in particular and by Kansans in general. It shows what energy, industry, taste and pluck will do. It gives a Kansas business house a name and standing throughout all the West and South.

When we were in Kansas City we had the pleasure of meeting Mr. Campbell, of the firm of Jas. H. Campbell & Co., who do business at Kansas City, Chicago and St. Louis stock yards. They follow a strictly commission business. They handle a large number of cattle, hogs and sheep at all three markets. They report prices good for hogs and sheep, but that cattle prices are but little better, though the outlook for future values is very favorable. Parties having stock on feed or ready to ship will do well to patronize this firm. They are reliable and thoroughly well qualified in every way to give satisfaction.

Book Notices.

THE CALENDAR of N. W. Ayer & Son, Philadelphia, Pa., for 1888, is well worth the price—25 cents, and that but little more than pays for the packing and postage.

The January number of *The Chautauquan* presents an unbiased discussion of the question of the saloon in politics, by means of letters written for that magazine by prominent men.

HEADS AND FACES, AND HOW TO STUDY THEM.—A manual of phrenology and physiognomy for the people, by Prof. Nelson Sizer, phrenological examiner, and Dr. H. S. Drayton, editor of the *Phrenological Journal*, 200 pages, October, 200 illustrations; paper, 40 cents; extra cloth, \$1, New York. Fowler & Wells Co., publishers, 775 Broadway. A new edition of this work, making 40,000 copies in about two years, has just been published.

Topeka Weather Report.

Sergeant T. B. Jennings, of the Signal Service, furnishes the KANSAS FARMER weekly with detailed weather reports. We make an abstract for publication and file the copy for reference, should we ever need details.

Abstract for the week ending Saturday, January 7, 1888:

Temperature.—Highest at 2 p. m., 49° on Tuesday the 3d; lowest at same hour, 8° on Saturday the 7th. Highest recorded during the week, 51° on the 3d and 4th; lowest, zero on the 7th.

Rainfall.—Rain fell in measurable quantities on the 5th, 6th and 7th; total, 48-100 of an inch.

Prof. Riley, one of the first authorities on insects, does not approve of whitewashing the stems of shade trees. As against the tussock moth it may be of some slight use, but the bag-worm, the web-worm and the elm-leaf beetle can not be affected by it.

Hood's Sarsaparilla

This successful medicine is a carefully-prepared extract of the best remedies of the vegetable kingdom known to medical science as Alteratives, Blood Purifiers, Diuretics, and Tonics, such as Sarsaparilla, Yellow Dock, Stillingia, Dandelion, Juniper Berries, Mandrake, Wild Cherry Bark and other selected roots, barks and herbs. A medicine, like anything else, can be fairly judged only by its results. We point with satisfaction to the glorious record Hood's Sarsaparilla has entered for itself upon the hearts of thousands of people who have personally or indirectly been relieved of terrible suffering which all other remedies failed to reach. Sold by all druggists, \$1; six for \$5. Made only by C. I. HOOD & CO., Apothecaries, Lowell, Mass.

100 Doses One Dollar

SUNNY SOUTH Good land, near the sea, cheap. Fine climate, excellent markets. Circulars free. E. C. Lindsay & Co., Norfolk, Va.

MONTANA HEARD FROM—Recent railroad extensions have developed exceptionally fine mineral, stock and farming districts. Maps and full particulars free, upon application to C. H. WARREN, Gen. Pass. Agt., St. Paul, Minn.

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Write for catalogue and price list before purchasing. J. L. BUCHANAN, Belle Rive, Ill.

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Absolutely Pure.

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150 Registered Rams for sale
As shown below at "hard-pan knock-down" prices.
Satisfaction guaranteed.



[Mention Kansas Farmer.]

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STOCK CAKE & ANTI-WORM REMEDY,

a cathartic stimulant for HORSES, CATTLE and other LIVE STOCK. This Stock Cake removes worms, purifies the blood and water, loosens the hide, acts upon the kidneys, regulates the system and puts the animals in healthy, thriving condition. Also is a Preventive Against Pleuro-Pneumonia in Cattle. Price 15 cents per cake.

Dr. S. P. Cregar, 1464 Wabash Ave., Chicago.



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All sizes and widths. Sold by us or any dealer in this line of goods. FREIGHT PAID. Information free.
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158 & 160 West Lake St., CHICAGO, ILLINOIS.

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ORIGINAL ONLY GENUINE
SAFE ALWAYS TO LADIES INDISPENSABLE
CHESTERS RELIABLE NEVER FAIL
ENGLISH DIAMOND BRAND TAKEN OUT
OR INCLOSE 4 PARTICULARS RETURN MAIL
CHICHESTER CHEMICAL CO. MADISON ST. PHILA. PA.
5,000 LADIES WHO HAVE USED THEM.

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CONSULT LORD AND THOMAS
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The Home Circle.

Blindfold.

What do we know of the world, as we grow so old and wiser?
Do the years that still the heart-beats, quicken the drowsy eyes?
At twenty we thought we knew it, the world there at our feet;
We thought we had found it bitter, we knew we had found it sweet.
Now, at forty and fifty, what do we make of the world?
There in her sand she crouches, the Sphinx, with her gray wings furled.
Soul of a man I know not; who knoweth can foretell;
And what can I read of fate, even of self I have learned so well?
Heart of a woman I know know not; how should I hope to know,
I that am foiled by a flower, or the stars of the silent snow?
I that have never guessed the mind of the bright-eyed bird,
Whom even the dull rocks cheat, and the whirlwind's awful word?
Let me loosen the fillet of clay from the shut and darkened lid.
For life is a blindfold game, and the Voice from view is hid.
I face him as best I can, still groping, here and there,
For the hand that has touched me lightly, the lips that have said, "Declare!"
Well, I declare him my friend—the friend of the who's sad race;
And O, that the game were over, and I might see his face!
But 'tis much, though I grope in darkness, the Voice that is hid from view
May be heard, may be even loved, in a dream that may come true.

Next month, next year, our souls we pledge
To nobler efforts, sweeter rest;
We hope to lay aside our cares;
With peaceful musings to be blest:
Our minds enlarge, our grace increase,
Our vain, ambitious strivings cease.

But death stands waiting, and his hand
Falls on us even as we strive,
With selfish purpose in our hearts
And selfish longings still alive.
Go, let peace for which we pray,
Each hour and moment leaves its way,
Seek thou its presence every day.

—J. Edgar Jones.

"God's scales of justice hang between
The deed unjust and the end unseen;
The sparrow's fall in the one is weighed
By the Lord's own hand in the other laid."

Real and False Modesty.

It would be well if young women were taught early in life that there is a false shame and an affectation of modesty as unlovely as forwardness, and which repels as effectively as brazenness. To be on the quiver for innuendoes, to have a smart faculty for extracting the bits of evil from any good, is all immodest. To see where harm is not intended is immodest. The young woman who thought she would die of shame because some gentleman came into the gallery where she was alone with the statue of the Venus of Milo, who fell into confusion and blushed mightily, advertised a modesty that was possibly only skin deep. A blush is something sacred to pure womanhood, and it is a sad spectacle for thoughtful eyes to note a young woman so far gone in the improprieties that she pretends to be shocked at things which simple, unaffected candor is far from thinking wrong at all. There are other virtuous and modest young ladies who manage to convey by subtle insinuations that they are deeply conscious of senses which a really modest woman would ignore. It is true, indeed, as a great writer has said, that a modest woman must be at times both deaf and blind. Disagreeable happenings, offensive to eyes and ears, are at times incidental to almost every one's life. The most sheltered young lady cannot be entirely protected. She may find herself in places where profane language reaches her ears, where objectionable sights reach her eyes. It is then time for her modesty to take on an armor of dignity; it is the time for her to be both deaf and blind.

There are many things in life that a young woman ought to know of, and which, if they did know, they would regard as great solemn truths, too sacred to be giggled at, which are not proper subjects for conversation, but which none the less exist, and should be well comprehended. For a young woman—or a young man, either—there is no safety in ignorance. The mother assumes unwarranted responsibility who leaves her innocent growing girls and boys to be educated in the mysteries of life by unthinking outsiders. Constant rubbing cannot wear off the delicate hue of the sea-shell, nor can the real purity of mind, the real modesty of pure womanhood, be more easily worn away. Mock modesty is twin sister to that virtue which consists in not being found out. Per-

sons who affect it are social "suspects." Beware of it, young woman, because it deceives no one, and because if you do not, young men who are in search of lovely wives will beware of you.—*Woman's Journal*.

Hindoo Abstemiousness.

There is no abstemiousness in the world, and no thrift, like the thrift and abstemiousness of the average native of India. Almost alone among the workingmen of the world, he has raised himself nearly above wants, has stripped himself of all the impediments of luxury. Millions of men in India, especially on the richer soils and in the river deltas, live, marry, and rear apparently healthy children, upon an income which, even when the wife works, is rarely above two shillings a week, and frequently sinks to eighteen pence. The Indian is enabled to do this not so much by the cheapness of food—for, though it is cheap, a European who ate the same food would want five times the money merely to feed himself—as by a habit of living which makes him independent of the ordinary cares of mankind. He goes nearly without clothes, gives his children none, and dresses his wife in a long piece of the most wretched muslin. Neither he nor his wife pay tailor or milliner one shilling during their entire lives, nor do they ever purchase needles or thread, which, indeed, is contrary to a semi-religious etiquette ever to use.

The poorer peasant inhabits a hut containing a single covered room of the smallest size, with an earthen platform or two outside it, and as he constructs and repairs his own dwelling he virtually pays no rent, except for the culturable land. He never touches alcohol or any substitute for it. There is an idea in England that he eats opium or hemp; but he, as a rule, swallows neither; firstly, because he regards them with as much moral antipathy as any English gentleman, and secondly, because he could not by any possibility pay for articles which in India, as everywhere else, are exceedingly expensive. He eats absolutely no meat nor any animal fat, nor any expensive grain like good wheat, but lives on millet or small rice, a little milk, with the butter from milk, and the vegetables he grows. Even of these he eats more sparingly than the poorest Tuscan. Once a quarter, perhaps, he will eat enough, during some festival, but, as a rule, he knows accurately what will sustain him, and would be enraged with the wife who cooks for him if she prepared more. He is assisted in this economy by a religious rule which we have never seen a Hindoo break, and which is undoubtedly, like the rule against killing oxen, a survival from a military law or custom of the most remote antiquity.—*Spectator*.

Nervous Days.

What woman has not felt the rarefaction of a day when her nerves seem so delicately poised that a feather's weight on the wrong side of the balance sends everything skyward and she feels as though she would "fly all to pieces." The children's voices seem keyed to a higher note than usual; the canary's song is shriller, and however sweet are the bells that chime all seem jangled and out of tune.

When such a day comes to the mother and home-keeper, her smaller cares and burdens are almost too heavy to be borne; she sees, in the sudden keenness of her mental vision, all the duties of a far-reaching future spread out as in a panoramic view and brought by the lens of her distorted fancy within touching distance.

I remember such a day, now several summers past, when the sunlight and bowers were calling me to come out and keep them company, but I resolutely shut my heart to their enticing, feeling that life was all too short and its stern duties too many for me to waste a moment in paths of pleasantness. My daughter Grace, then a little maiden of 3 years, watched my hurrying steps and nervous fingers until she could bear it no longer, and cried out: "Mamma, mamma, what are you in such a 'cully' for?"

"Mamma must hurry, dear, she has so much to do."

"What is 'so much,' mamma?" said the little questioner, and I, in a most convincing way, enumerated about a half a hundred bits of work that would take me a month to accomplish, and this small philoso-

pher made answer: "But you don't have to do it all to-day!"

I flung aside my sewing, and, taking my little preacher by the hand, went out and spent a pleasant half-hour under the trees, where, with my clearer vision, I realized that I had allowed my "sea of troubles" to roll towards me until I was in danger of being overwhelmed, when a tiny hand and voice had stayed the tide.

But though we cannot always see the hand nor hear the voice, the remedy is certainly somewhere for each and every one of us, and it is a positive duty to ourselves and to those about us to seek and use the one best suited to our needs, as the feeling, if encouraged, soon rusts out the finest spirit and corrodes the heart.—*Good Housekeeping*.

Cleaning Windows.

A correspondent of an exchange has the following useful suggestions to give on the subject of cleaning windows:

There are few things that add so much to the attractiveness of a house as clean windows, and the housekeeper, recognizing this, deems it one of the important duties of her household that they shall be as clean and bright as she can make them. To keep windows bright and clean is anything but an easy task, for they require to be looked after constantly to keep them at all presentable. No matter how clean and tidy the room may be in other respects, if the windows are not clean all the tidiness goes for nothing.

Many housewives, who are anything but careless in the rest of their work, are neglectful of their windows, inasmuch as they may often clean them, but do so in such a careless manner that they are never really clean. Every woman has a way of her own for this work, which she considers far superior to any other, but very few of them have a good method, and may be improved on easily.

Many women use soap to help them in washing windows, and then wonder why the windows look so streaky. Soap should never be used for this work, for if it is, the glass will never look as clear as that which has been cleaned without. To be sure, they are always rinsed after washing in this way, and, even then, though they may look as well as those washed in clear water, yet they do not look any better, and the extra labor is thrown away. Do not use old table linen for washing or wiping windows. It is, certainly, nice and soft, and would seem to be just the thing, but the wiping off of the lint, which old table linen is sure to leave after it, outweighs all the merits of softness. Cold water is usually used, but this requires so much wiping, and if there is any grease on the window, which is often the case where there are children, so much hard work to remove it, that warm water is much to be preferred.

Choose for this work a warm day; if cloudy all the better, though by no means ever clean windows on a damp day. If it is a sunny day do not wash any glass while the sun is shining upon it if you would have it free from streaks. Even if you have to wait until afternoon for the sun to leave the front of the house, let the windows wait until then or a cloudy day rather than have them look as though half cleaned. First dust the windows inside and out, using a small paint brush for the crevices and corners of the sashes. Wash thoroughly the sashes and woodwork around the panes, and if soap is used, see that as little as possible of it touches the glass. Wash the woodwork on the outside of the window, as that is usually very dusty and should always be cleaned before the glass is touched. Have a small flannel or cotton cloth for washing and a large, old cotton one for wiping. Never use new cotton for this purpose, for without exception it is the hardest kind of cloth for drying windows. Have a basin of pretty warm water, the hotter the better, and into it put a few drops of ammonia. With the small cloth wash each pane thoroughly, using a small pointed stick for the corners (some save a wooden skewer for this purpose), and if the water is very hot, wipe immediately, for with hot water the panes wipe much easier and dry very quickly. Clear hot water without the ammonia may be used, and will do the work very well, but the ammonia makes the work easier and imparts to the glass a fine gloss. Some use a few drops of kerosene in place of the ammonia, and claim it as excellent.

Wash the inside of the glass first, so that when doing the outside any speck or streak may be easily seen and removed. Windows treated in this way may be washed in one-half the time in which they are usually done, and look much better.

Ignorance of Girls.

If a girl never hears a word about economy from her birth, and is only conscious that to secure the means to gratify her slightest wish she needs only to stretch out her hands and they will be abundantly filled, how can one expect after marriage that she can have the faintest knowledge of the duties that must belong to her in the care of her household? She has never been called upon to know anything about her own expenses. What she fancied she wanted she bought without a thought that it might be well to learn whether she could afford the money. How money came, how it was always ready for her when she asked, were questions that she had never been taught that she ought to ask and to understand the answer.

As far as any teaching she has ever received, she might imagine that money grew in the woods, and her father had it gathered for her as wanted—and of course her husband would do the same. No education before marriage ever taught her anything more rational. With such a girlhood, free from every thought save that of her personal gratification, what reason can there be for surprise if she makes many mistakes—well for her if they are not irremediable. Duty was something never mentioned to her when a girl. After marriage her husband gives her no insight into his business affairs, no cautions as to expenses, never talks to her or consults or advises with her about their mutual expenditures. The same cruel love and indulgence—or it may be indifference—surrounds her in her new home, and thus she continues to be left in utter ignorance of all practical knowledge, simply a toy, a butterfly, seeking only sunshine and personal enjoyment.

And yet under proper training what a noble specimen of womanhood she was perhaps capable of being made!—*Mrs. Henry Ward Beecher, in New York Star*.

Fashion Notes.

Bustles are slowly but surely diminishing in size.

Black lynx is a good fur to trim a long seal garment with.

There is a growing tendency, says the *Season*, to wear the hair low on the neck.

Red and blue combined in wool dresses so much liked in autumn are fashionable for winter.

Water-proof costumes to take the place of the ugly water-proof mantles are coming in style.

The new seal sacques and paletots are beautifully curved in the back seam to fit over the bustle.

Cross fox furs are very becoming, the brown bars or crossings on the yellow having a fine effect.

The prettiest fur border for a black plush wrap trimmed with fine cut jet is black fox, but it is not cheap.

Stoles and boas of bear or wolverine fur, with muffs to match, are affected by young ladies who dress in English styles.

The long seal wraps of this season are unusually elegant, especially when trimmed, as many are, with Russian sable, unplucked otter, or the finest grades of lynx.

All shades of yellow, from the beautiful creamy primrose and corn colors, and grading from orange to the most pronounced copper dyes, are noted in fabrics for full dress wear and for expensive millinery.

All street jackets have some sort of braiding. The handsomest show tinsel braiding on the waistcoats, but very popular are those of dark blue, edged all around with a cording of black astrachan and black braiding of rich and heavy design.

A street costume worn by a pretty brunette was a tailor gown of light gray cloth of very rough finish. It was trimmed only with many rows of gray silk stitching. The coat was of gray astrachan; a small, gray velvet toque, with two gray tinsel-sprinkled quills, completed the very becoming costume.

A very pretty and simple dress is of Gobel blue cashmere, the plain skirt trimmed with a deep row of brown braiding of the sort that comes with patterns ready to be applied. The long curtain draperies are of the untrimmed cashmere, and the plain basque bodice has the brown braid applied back and front in V shape, the collar and cuffs being also braided.

The blood is the source of health. Keep it pure by taking Hood's Sarsaparilla, which is peculiar in its curative power.

The Young Folks.

Oh, Bold is the Frost.

Oh, bold is the frost that comes nipping and nipping
And painting the woodland over.
Till the woods are ablaze in the soft autumn haze
That hangs o'er the distant cover,
And the thin crispy air to the meadow so fair
Clings with the strength of a lover.

Oh, bold is the frost that comes tipping and tipping
His goblet of gems o'er the trees
Till the acorns fall down from the oak's lofty crown
At every caress of the breeze,
And the woodland perfume and the grape's purple bloom
The world's weary senses appease.

Oh, bold is the frost that comes sipping and sipping
The breath of the summer away.
And it kills in its strife that the springtime gave life
In the tender sunshine of May;
And it frights the wild bee in the hollow old tree,
And fills every heart with dismay.

Oh, bold is the frost that comes dipping and dipping
Its hands in each river and rill,
Till it stops their bright smiles and frolicsome wiles
And bids their blue wavelets lie still.
Then it trails its fierce hands o'er the innocent lands,
And withers the valley and hill.

Oh, bold is the frost that comes gripping and gripping
With fingers so bitter and cold.
Oh, help those, good Lord, when the frost is abroad
Who have neither labor nor gold;
For the rich in their stealth they garner their wealth
With grimness that cannot be told.

—Elizabeth Baker Bohan.

"Not all in vain is the lesson taught
That a great soul's dream is the world's new thought,
And the scaffold marked with a death sublime
Is the throne ordained for a coming time."

YOSEMITE.

The Sublime and Beautiful—A Wealth of Grandeur Defying Adequate Description.

How much has been said, and yet can be said, about Yosemite, this wonderful relic of nature's architecture. I shall not think of describing it. The task is too great, and my words are too weak and fall infinitely short of the grand reality.

Yosemite should be studied well. I saw it but two days and can only give a few transient impressions.

Yosemite (meaning grizzly bear) was the name of a tribe of Indians, who in 1851 were very hostile. It was while the whites were pursuing them that they discovered these wonderful mountains.

We stood on the rocky precipice of Inspiration Point and looked down into this stupendous chasm as one views a city from a towering height. Across the gorge were mountains peaked with snow, while beneath us was the narrow, sparkling stream and meadow, closed in by granite walls from two to five thousand feet high; walls so smooth and perpendicular that one can not climb out but at one or two places. There is an unbroken wall of granite two-thirds of a mile high, on the top of which is a gigantic red-wood tree, which looked to us like the merest twig. These measureless walls are of many colors, brown and white mixed, gray, and red, with a still darker shade formed by streaks of falling water. The hills though almost upright are clothed with immense firs and cedars, some of which shoot up as straight as arrows.

It is with a bewildering sense one gazes at all this as it bursts upon him for the first time; there is no adjective, no exclamation I can think of to express the grandeur.

Riding for an hour and a half down, down amid sharp rocks and dizzy inclines, where we found it hard to keep our saddles, and sometimes narrowly escaped pitching over our horses' heads, we found ourselves in the valley, the length of which is nine miles, and its average width two-thirds of a mile. The Merced river, which averages sixty feet in width, runs through this, fresh from the Sierras, and is a delightful stream, so perfectly clear that numerous trout may be seen at a good depth. Crossing it by a little rustic bridge, we are in a level meadow of tall grass colored with myriads of wild flowers, including the honeysuckle, primroses of crimson and yellow and a lily-

shaped blossom of exquisite purple, the name of which I have forgotten.

The rocks are the greatest feature of the Yosemite. When you look at nine miles of solid granite walls, ranging from three to six thousand feet, it is with bewilderment. You are overwhelmed with their solemn immensity.

Cathedral Rocks, Sentinel Towers, and Saint Dome, which is a mile high, the gigantic North Dome and the Three Brothers, which is a triple-pointed mass of granite, all these have vegetation, hardy trees apparently growing out of the rocks, some of which have been there thousands of years.

El Capitan, however, is the grandest of all—3,900 feet high. Not a single tuft of grass shades its clean-cut face. Nothing can climb that smooth, stupendous wall. There it stands in its massiveness, indestructible. The Spanish name signifies "the leader."

I shall not linger on details, but try to give you a little idea of Yosemite falls. There are three of them. The upper one 1600 feet; rapids, 434 feet; lower 600 feet. But just think of a cataract or cascade fifteen times higher than Niagara, and for nearly a half mile without a single break. We did not venture to the rapids, as it is a very difficult and fatiguing undertaking.

For four or five hundred feet the fall of the water is undisturbed, then striking a broad, inclining rock, it shoots over it and spreads into a huge shining fan, and rushes to the bottom. Bridal Veil fall is much narrower, and the mist hides it somewhat, though when the sun shines on this soft mist, it reveals a beautiful rainbow. The valley breaks into three canyons, and the Merced into three branches; one, the North fork, passes through Mirror Lake, a sheet of water of exquisite beauty and transparency. The reflection of grass, trees, mountains and sky, is so perfect as to be startling, as you fancy they are more than images and shadows. The world seems turned bottom up.

About two miles from the hotel we left our horses, as it is very difficult of access. The trail is narrow, and rises over a thousand feet to the mile. Forests of great pine trees, some over 200 feet high, were all around us, and here and there a mighty cedar towering above all, a guardian sentinel solemn and immovable. Persevering an hour and a half longer, we climb to Vernal fall, the full swelling torrent of the Merced.

It rushes and roars like a maddened creature over rocks and crags, then takes a leap of three hundred feet.

In the afternoon when the sun shines on it two rainbows of dazzling brightness may be seen at its base, and as the mist or foam gathers the two bows come together and then extend to a perfect circle. This is what is called the Round Rainbow. It lasts but a moment when it suddenly disappears like the snuff of a candle, but after an interval of five to eight minutes this lovely loop of gold, crimson and purple comes again. It was so impressive and fascinating that we stood and watched it for half an hour, and when we turned away it was with hearts full of humility and reverence for Him who made all things.—M. R. Abbott.

Interesting Scraps.

An Ohio tame crow has lived to pass his 321 birthday.

A Boston barber has retired after sixty years of service.

Japan keeps a standing army of 50,000, with 200,000 reserves. They carry the breech-loader and drill more than any men in the world.

To be free-minded and cheerfully disposed at hours of meat, sleep and exercise, is one of the best precepts for long lasting.—Lord Bacon.

Those that place their hope in another world have, in a great measure, conquered dread of death, and unreasonable love of life.—Atterbury.

The skeleton of a man was recently found in a thicket on the battlefield of Antietam and by its side the scabbard and blade of an officer's sword.

It has been proven through a series of experiments that a large ocean steamer going nineteen knots an hour will move over two miles after its engines are stopped and

reversed, and no authority gives less than a mile or a mile and a half as the required space to stop its progress.

Asbury Park boasts of a pet dog who appears on the broad walk with a diamond collar. He is a Maltese pug, and belongs to the wife of a New York broker.

A medical writer on hay fever says the English and American people are the most susceptible to it, and of those, the upper and cultivated classes and the male sex. In the north of Europe the disease is almost unknown, while in France, Germany, Italy and Spain it is rare.

An apple tree on the farm of Capt. T. J. Williamson, in Pleasant county, Va., which has borne fruit for a number of years, has never been known to blossom. This year the tree is again full of fine, large apples, the strangest thing about which is that the fruit has neither core nor seed.

A Washington man tells of a quarrel between two negro boys. The larger boy, with great volubility, was applying every sort of abusive epithet. The younger boy, leaning against a fence and steadily regarding the speaker with a sullen scowl, waiting for a halt. At last it came. "Is you done?" "Yes, I is done." Then slowly and coolly the younger said: "All dem tings you say I is, you is dem."



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Senator Plumb has taken charge of the bill introduced by General Logan, to equalize bounties.

The Acme Farmer's club, Jefferson county, meet to-day at the residence of Marion Graves, and an interesting program is to be discussed.

The ninth annual exposition of the Western National Fair Association, will be held at Bismarck Grove, Lawrence, Kansas, September, 3, 4, 5, 6, 7, and 8, 1898.

The House of Representatives at Washington, has 325 members. Of that number 216 are lawyers and 17 are farmers. There are 16 manufacturers, 13 merchants, 10 bankers, 9 editors, 6 physicians.

From a report of the internal revenue collector for Kansas, it appears that money received for beer stamps in 1897, greatly exceeded the receipts of 1896 for the same purpose, while the spirit stamp receipts were much less.

Typographical Errors.

A correspondent, Mr. Grover, calls attention to some errors which appear in the printing of his article on "The War tariff". It is unpleasant to have one's language thus handled, and we regret it exceedingly. The meaning of the writer is clear, however; so that he will not be misunderstood.

The State Board of Agriculture hold their annual meeting in Topeka, this week, beginning Wednesday evening, and continuing to Friday. An interesting program has been prepared. Many subjects of importance to farmers are to be discussed, but we can give no report of the things done, because the paper will be worked off before the discussion begins. The principal business of the meeting is to elect a Secretary to take the place of Hon. Wm. Sims, who retires at his own request.

THE INDIVIDUAL MAN.

A correspondent in this issue of the *KANSAS FARMER* discusses trusts, syndicates and kindred organizations, and when he refers to suggestions contained in an article which appeared in these columns some weeks ago under the head—"A Farmers' Syndicate," he expresses a thought which will bear a great deal of thinking about, namely: That men lose their individuality, and to a great extent their personal liberty and independence when they become members of a trust. That is true; men do become so wholly absorbed in business combinations as to be practically dead to all the world outside that may have dealings with the organization. Let a poor section hand, for instance, set out to find the soul of a railroad company, or to find any one person who is authorized to hear and determine his complaint if he have one. He soon discovers that the corporation is a creature of law, composed of an association of men governed by a board of directors who hold regular meetings once a year, and whose decisions are executed by certain designated officers. Stockholders go to their meetings as individual men, but the instant they organize, the act of a majority of them binds the whole. A majority of the directors determine the policy of the company. And so it is in every case of the kind.

Still, there is nothing new or strange about it. It is precisely the same principle which decides in civil and political affairs, and in all social, benevolent and religious organizations. Whatever difference exists between the two classes of cases is in degree and not in kind. At popular elections the majority of votes determines the verdict of the people, and minorities must submit. This applies in small as well as in large elections, if the expression is a good one. The policy of the general government is determined by the result of an election; so of a State, a county, a city, a township, a school or road district.

Some years ago—say fifty—there were little shops scattered all over the country where mechanics worked making wagons, furniture, shoes, carpets, and other things. They disappeared. Wagons are now made in great establishments where men are employed by the hundred and thousand, one man working on hubs, one on axles, one on bolsters, one on spokes, one on tires, one on bolts, and so on. Shoes are now made in large factories where many persons are employed, every one working on a particular part of the shoe. All these persons have, to that extent, lost their individuality. The old wagon-maker and shoemaker were absorbed by the new system. So it is in all lines of employment except agriculture, and it is because of this combining in other departments of labor that farmers are so hardly pressed. They, too, are beginning to feel the effects of small profit margins. Shoes are made cheaper than they were when made by hand, so are wagons and bureaus. And now men go out on the fertile prairies and plow by steam, sowing thousands of acres of wheat in one season, doing nearly everything by machinery, reducing the cost of raising wheat 25 to 50 per cent. How is the small farmer to meet this cheapening of processes in his own calling? How is he to become a "big farmer," and enjoy advantages of large capital in his work? He must join hands with his fellow farmer in some way, so as that farmers may avail themselves of influences which come with organization. And this is the great problem for farmers to solve. How shall they act so as to get all the good there

is in organization, without wholly losing their individuality?

ONE AND ONE ARE TWO.

Nothing in the history of the *KANSAS FARMER* is more encouraging to the management, or more sincerely appreciated by them, than the very general effort among our old subscribers, in these hard, close times, when they renew their subscriptions for 1898, to send with their own names and dollars those of other and new subscribers—one each. Never before has this been so common as it has been within the last sixty days. Many are the letters we receive daily containing two dollars—"one for me and one for A. B.," adding—"we like your paper."

This, we report, is encouraging. Our gratitude goes out to the workers with these words. The paper will not disappoint you. The man who adds another name to his own in this way, does his part toward doubling the subscription list of the paper, and to that extent assuring its improvement; and when the list becomes large enough to justify it, the paper will not only be larger and better than it is now, but it can be made still cheaper. The greater the number of papers the smaller the margin of profit may be on each. One and one make two. May the good work continue.

Silver and Gold Certificates.

Statesmen are fast learning what good money is made of paper certificates based on the precious metals. The act of 1878 which requires the coinage of silver dollars in number from two million to four million annually, was a compromise, and monometallists thought that in a few years people would demand the repeal of the law, because, they said, silver money would become so plenty and so cheap that all the gold would be withdrawn and everything would go wrong. But they were deceived. The Secretary of the Treasury says he has not been able to print silver certificates as fast as people want them.

It is now proposed to repeal that law and to use silver bullion in place of coin as a basis for certificates. The new bill proposes to allow the deposit at any mint or assay office of gold and silver bullion in quantities not less than five ounces of gold or eighty ounces of silver, and the receipt thereof of coin certificates, which are to be a legal tender; to have the existing gold and silver certificates canceled when received at the Treasury; to have no gold coined hereafter except as necessary to redeem obligations expressly payable in coin; to have the bullion received under this act melted into bars and deposited in the Treasury.

That bill is in the right direction. It is a fair reflex of public sentiment on the money question. The experience of our people in monetary affairs the last twenty-five years has been worth a great deal to us. We have learned how to float different kinds of money at par, something never learned before—simply to make it all legal tender in the payment of all debts, with the government credit behind it. That makes the money as good as the government.

Whether it is better to use bullion than coin and save expense of coinage, is matter for discussion, but we see no good reason for canceling certificates now out, for they are based on coin that will remain. Would it not be better to let every available dollar of that kind of money remain in circulation? The coin not represented by certificates would probably suffice a long time for all coin uses. Certificates based on coin is the best money in the world, and if the existing coin certificates remain in circulation there will be less danger of legislation to alter the coin weights as now established by law.

Some Plain Facts About the Tariff.

A good deal of spirited correspondence has been printed in the *KANSAS Farmer* within the last six months on the tariff, and the reader noticed, doubtless, that some of the writers occasionally referred to what they regard as prejudice. As to matters of fact it can make no difference whether persons have or have not prejudices; and it is well, therefore, to bear in mind always, that there is an important difference between facts and opinions. In the discussion by our correspondents a great deal of ground was gone over, with but little statement or agreement as to foundation facts. In order that readers may judge for themselves, we will state a few facts plainly.

- 1.—The primary object of tariff laws is the raising of revenue.
- 2.—Revenue so raised takes the place of taxes collected directly from the people, and is raised for the same purposes, viz: government expenses.
- 3.—Prices of articles produced in this country are affected by tariff duties levied on like articles imported, according to the relation which the quantity or amount, or extent of the home product bears to the total consumed. To illustrate:
 - a.—The price of an article which is not produced at all in this country is affected by tariff duty to the full extent of the duty, as coffee, tea, spices, etc.
 - b.—The price of an article which is produced in this country in quantities sufficient to supply, and which does supply the home market, is not affected by the tariff duty on the like articles imported, as edge tools, builders tools, agricultural implements, cut nails, wheat, corn, etc.
 - c.—Prices of articles which are produced in this country, but not in quantities or amounts sufficient to supply the home market, or to seriously interfere with importation, are affected to nearly the full extent of the duty or less, according to the proportion they bear to the total consumption of the particular articles, as sugar, cloth, clothing, dress goods, embroidery, etc.
- 4.—The amount of revenue derived from tariff duties, depends upon the amount or quantity of goods imported, and not upon the rate of duty; more revenue may be derived from lower duties when the importations are greater; less revenue may be derived from higher duties when the importations are less.
- 5.—With respect to the tariff, there are three classes of economists: One favors free trade absolutely; one would lay duties on foreign goods for revenue but for no other purpose; one would so adjust the duties as to afford protection to home industries.
- 6.—As to the amount of revenue to be raised by the tariff, all tariff advocates favor limiting it to the necessities of the government.

Excursion of Horticulturists.

The occasion of the American Horticultural Society's meeting at San Jose and Riverside, California, is regarded by the Missouri Pacific Railway company, as of sufficient importance to justify excursion rates of fare to persons going to and from the meeting.

The society is to meet at San Jose, January 24, 25, and 26, and at Riverside, on the 7th, 8th and 9th days of February. Mr. H. C. Townsend, general passenger agent, of the Missouri Pacific, in response to a letter from Secretary Ragan, gives the full particulars concerning the excursion. A special train will be provided for members of the society, leaving Kansas City, Jan. 12, at 9:30 a. m. Fare for the round trip for that point, \$60, sleeping car extra.

Strike in the Coal Regions.

In our news column, last week it was noted that railroad hands and coal miners along the line of the Reading railroad in Pennsylvania, had quit work. The number of men out is given variously, ranging from 40,000 to 45,000, all members of the Knights of Labor. The cause is said to have been the peremptory discharge of a few men by the Reading railroad company in violation of an agreement with the Knights to arbitrate all matters of difference and to discharge no men without a hearing. The president of the company says the discharged men refused to obey orders and were dismissed summarily. The Knights, by a committee, sought an interview with the officers of the company and were denied the privilege, the answer being to the effect that any individual person would be heard in his own behalf, but that no committee or delegates from the Knights or other organization would be heard. The strike was not ordered until after these preliminaries had occurred.

The effects of the strike are very serious, indeed; for anthracite coal has advanced in price in all parts of the country which received coal supplies from the Lehigh region. The day the strike was announced, Philadelphia coal dealers announced an advance, the next day Pittsburg and Chicago followed, and now in many places the price for that class of coal is 100 per cent. higher than it was on New Year's day. The railroad company owns large areas of coal lands and is letting individual operators work them, whenever application is made to do so in the vacated mines, and the officials say they have no trouble in getting all the men they need to run the trains. The Knights issued an order in the beginning against everything like violence by their members, so that no trouble has yet arisen beyond the abandonment of the mines. The cars are running regularly, but the quantity of coal handled is less every day, and the falling off is so great that thousands of people will suffer for fuel if there is not a favorable change in the situation soon.

This brings up the labor question again in this important phase. The company claims the right to manage its own business in its own way, and that is the only doctrine which can be held good in such a case as long as the company keep within the law and deals justly and fairly with all. On the other hand, the men claim that they and the company entered into an agreement as to certain matters and the company has violated the agreement. Conceding both parties to be right, if such a thing can be; or, supposing both to be wrong, it does not, in either case, help the third party—the public outside that relied upon the miners and the railroad men to supply coal as it is needed. And so it is in relation to every strike of that character. If there were no persons interested but the particular railroad men and miners who are the direct parties to the controversy, it would not concern anybody else; but it is not that way, and never is in any such case. People in Kansas and in California—every place where the Lehigh coal is used suffer because of the strike. There is no need now to discuss causes, we must apply ourselves to remedies. The people in their organized capacity, must protect workmen against power of great corporations, and that can be done only by affording ample means for speedy redress of grievances before impartial tribunals and that without expense. Railroad companies must be held to rigid compliance with law, and men who work for them must have adequate protection. As it is now, a poor laborer is lost the moment he attacks

a corporation, and simply because of his poverty. It is not because he has or can obtain no standing in court, but he can not afford to pay his way there. Every corporation has one or more lawyers of learning and ability always regularly employed, and they have so much legal business on hand that they have docket clerks to keep record of cases in court, and trace and note the various stages of their history. The poor man has no lawyer, and no money to pay one. He must submit to what befalls him and be thankful it is no worse. He needs help and must have it. Means must be provided for his relief. He must have a standing in court, and the government must bear the expense. Then we will have no more railroad strikes that confuse the business of the country, or cause suffering among innocent people.

December Weather.

From Prof. Snow's report of observations taken at the State University at Lawrence: This month was nearly of the average temperature, there having been ten warmer and nine colder Decembers in the past twenty years. The rainfall was more than 25 per cent. above the average, and the cloudiness and wind velocity were slightly above the mean.

Mean Temperature—Twenty-eight and thirteen-hundredths deg., which is 1.18 deg. below the December average. The highest temperature was 60 deg., on the 3d; the lowest was 8 deg. below zero, on the 28th, giving a range of 68 deg. The mercury fell below zero on four days. Mean temperature at 7 a. m., 24.32 deg.; at 2 p. m., 35.59 deg.; at a p. m., 27.31 deg.

Rainfall—Including melted snow—2.08 inches, which is 0.49 inch above the December average. Rain or snow in measurable quantities fell on six days. Snow fell on four days, on two of which the quantity was too small for measurement. The entire depth of snow was three inches. There was one thunder shower. The entire rainfall for the year 1887 now completed has been 33.84 inches, which is only 0.86 inch below the average annual rainfall of the preceding nineteen years.

Twenty Years' Weather Record.

Prof. Snow has kept a weather record continuously twenty years at the State University at Lawrence. We have requested him to prepare for publication in the KANSAS FARMER a statement of meteorological conditions covering the entire period, but treating the years separately, giving such facts and notes concerning seasons, crops, insect depredations, droughts, storms, etc., as are not given out in weekly or monthly reports.

In reply to our request Prof. Snow encourages us to hope for such a statement soon. In the meantime, we give a few figures relating to temperature and rainfall for the period—twenty years.

The highest temperature recorded was 105 deg. in 1832 and in 1886; the average of the highest temperatures for all of the years is 100.6 deg. The lowest temperature recorded during the period was 26 deg. below zero in 1873; the average of the lowest temperatures for all the years is 12.6 deg. below zero. The average of the mean temperatures for all the years is 52.93 deg.

The average annual rainfall, including melted snow, is 34.66 inches. The average number of days on which rain fell is 103. Average annual fall of snow is 22 inches. Average annual number of thunder storms 29.

We learn from Hon. D. W. Wilder, president, that the twelfth annual meeting of the Kansas State Historical

Society will be held in the House of Representatives, at Topeka, on Tuesday evening, January 17, 1888. Members of the board of directors will be elected, and other business transacted. Brief addresses, pertaining to subjects of Kansas history, will be delivered. The public are invited to attend. A meeting of the board of directors will be held at 3 o'clock p. m. of the same day, in the rooms of the society. All members of the board are requested to be present.

Inquiries Answered.

GANG-PLOWS.—Please ask through the columns of your paper for the experience of your farmer correspondents, in the use of gang-plows, and to note what make they consider the best.

EVERGREEN SEEDS.—Can you tell me where I can get evergreen seeds, such as pine and cedar, and the best way to grow them?

—J. W. Williams, Hoyt, Kas., Bailey & Hanford, Makanda, Ill., or any other of our tree seed advertisers.

MEADOW OAT GRASS.—A correspondent wants somebody's experience with meadow oat grass. Dr. Robson, of Dickinson county, has written several interesting letters to the KANSAS FARMER on the subject, and this request will, we hope, call him out again.

FISH.—Referring to the fish pond question in the KANSAS FARMER last week, Dr. Bohrer, Rice county, writes us as follows: I understand that to explode a very few dynamite cartridges in a pond will kill fish, turtles, frogs and snakes, all of which he should get rid of before putting in carp. Let him get some one to use the dynamite who understands how to manage it.

MAMMOTH CLOVER SEED.—I would like to get the address of a farmer that has Mammoth clover seed for sale which was raised in Kansas the last year.

—You will find an advertisement of Mammoth clover seed in the KANSAS FARMER this week. Mr. Edwin Snyder, of Jefferson county (P. O. Okaloosa), raises Mammoth clover and may have seed.

TRANSPORTATION.—Our opinion is asked as to whether we favor a transportation system which will furnish carriage "at as near a nominal cost as possible."

—Yes. We would have the transportation system of the country conducted as systematically as the postoffice system is, giving the people carriage at actual cost as nearly as could be estimated under any general system.

BLACK-LEG.—A reader sends the following: "When the animal begins to show signs, kicking and looking back at its side, get a rope on it and tie up short; have a sharp knife, and which leg it kicks the most out a small gash in the hollow, just above the front part of the hoof, and then you can see a large vein; cut it, and if very bad won't hurt to cut all of its feet. I have cured two this way, and hope it may benefit some of the readers of the FARMER."

WEAK MARE.—I have a mare that has been bred three years in succession. The first two colts came alive, but so weak they died a few hours after; the last one came dead. If any of the readers can give the cause and cure will greatly oblige.

—The mare was not strong enough to produce healthy offspring. She was worked too hard, or did not have the right kind of food, or not enough of it. To get good colts the mares must be well cared for.

SORE TONGUE.—Please answer through your paper what is the trouble with my mare. Her tongue seems to have little sores on which seem to be eaten in the tongue. When the bridle bits are in her mouth she slobbers very badly and keeps licking her tongue. The mare is in good flesh, feels well, and works all the time.

—There is something wrong about the teeth—projections or foreign substances which cut the tongue; or the trouble arises from weeds in the hay which blister the tongue. Examine the teeth carefully; you will probably find the irritant there.

SUB-IRRIGATION.—I have been noticing the FARMER for some man's experience on what I would call sub-irrigation with small drain tiling laid in rows sufficient to create moisture at a depth below the plow, and kept supplied with water from a tank and wind-mill. Now I ask, did you ever hear of the experiment? I have a mind to try a small piece of ground this season in that way.

—We do not know of any plan just like that in practice. Some horticulturists use iron or lead pipes laid under ground with openings at particular places where water can be let out at pleasure.

GRAPE VINES.—I have some grape vines seven years old that have not been plowed for the last two years; have mulched them with stable manure and straw. But the drought last summer nearly killed them. What shall I do to revive them? Plow and tend them, or what do they do with old vineyards? Tend them every year?

—Cut back closely next month; then wait till the opening of spring and note how the vines behave. If they look sick and weak, cut back nearly to the ground, and raise new vines from the stumps if you can. And in order to be sure about it, set out some new healthy

vines. All vineyards, old as well as new, ought to be cultivated every year; not plowed or worked deep, but the ground ought to be kept clean and the surface kept fine.

BARREN MARE.—I have a mare that I wish to have a colt from, but cannot get her to breed, she comes in season every three weeks, but will not breed. Can some of the readers of the KANSAS FARMER tell me what is the trouble, and what to do?

—Such cases are troublesome. The best thing probably, is to change feed about three months before the time of desired coupling. Feed no grain but oats; cut up hay or straw and mix it with ground rye and oats; mix wet, so that the chops will adhere to the straw; give a little oil meal, or scalded flax seed occasionally; let her have all the salt she will eat, feed no dusty hay, and see that her stable is comfortable and free from all offensive odors. Let exercise be light but frequent. In short, build up a vigorous animal.

BONE SPAVIN.—One of my horses has a lump on his left hind leg right below the knee joint on the inside; it is about one and a half inches broad through and about three-fourths inch high, and is right hard, and makes him quite lame after hard pulling or driving.

—It is bone spavin. If it is not too far advanced it may be removed by the application of poultices and blisters. For the first day of treatment bathe it frequently with warm water, then apply a poultice of oil meal, soft and warm; continue poulticing several days until the enlargement becomes softer; then apply a liniment, twice daily—well rubbed in—made as follows: 3 oz. tincture of iodine; 1 oz. aqua ammonia; 1 oz. turpentine; 1 oz. glycerine. Rub well and continue application until the place becomes sore; then grease it once a day until healed, and let the animal have perfect rest. If the last stage is reached, nothing but firing seems to do any good, and that leaves the joint stiff.

FISTULA.—I have a 4-year-old filly that has a gathering on her shoulder. It commenced to gather about the 20th of September last; it is on the neck about the top of the shoulder-blade and in front or on the front edge of the shoulder-blade. It gathered and broke on the right side, or rather I opened it, and I thought it had not well; but last week it commenced to gather on the left side again and has also come open and is running on the right side again. I am afraid it is fistula. If you know of any remedy for it, or can tell me what it is, I will be ever so much obliged.

—It is fistula and must have prompt attention. An incision must be made deep enough to reach the seat of the trouble and it must be kept open and washed until thoroughly clean and healthy. If the bones have become affected they must be removed. The cut must be low enough to allow the pus to flow out as it forms; a tape must be inserted to keep the wound open, and the cavity must be syringed daily with some stimulating wash (chloride of zinc $\frac{1}{2}$ dr., water 1 qt., is good). If there is no veterinarian near, ask the best surgeon you are acquainted with how to perform the needed operations.

STATISTICS.—There is complaint made by some men against the statistics by the law required to be collected by the Township Assessors. It is claimed that those statistics in regard to the amount of the various crops are made use of by grain gamblers and speculators to control prices. Quite a number of farmers in this vicinity have refused to give any statistical information on this account. Will you give us some information on the uses of this statistical information? And is there any truth in the assertion that it places farmers at a disadvantage when they come to sell their produce by such facts being made public?

—The statistics are required by law for general information. There is nothing gained by withholding the facts, for grain dealers and all classes of dealers in farm produce have special agents among the people in every locality where reports are not regularly made officially. It is better to give the facts just as they are, for then, to a great extent at least, we may prevent or avoid frauds by private speculators. Official reports are relied upon by both sides in a deal.

POLITICS.—Can't you let politics alone and write and publish your good and valuable paper for the farmers, no matter what party we belong to?—For I am confident you would not have said one word about the President's message if a Republican President would have sent it in.

—Yes, we could let politics alone. We could send out a paper every week that would have about as much force in it as a last year's almanac. We could fill up the paper about routine work on the farm, about plowing, planting, marketing; about raising stock and growing fruits and vegetables, never saying a word about corporate extortion, nothing about corruption in politics, not a word about taxation, high salaries, or low prices of farm products, never once intimating that corporations and trusts are drinking up the life-blood of the people, and never suggesting that taxes are unnecessarily high, nor proposing any remedy. Yes, we could send out a lifeless paper. We could show by our want of vigor that we care nothing about the very things which do most of all concern the farmers. But what would such a paper be worth? What member of Congress would care to know what it contains? What influence would such a paper have anywhere? What effect would it have on public opinion on any subject? Who has any respect for the judgment of man without opinions? Does the wr of that letter have no interests public affairs? Does he not want interests of agriculture looked after in places, and especially in legislative? Is he ready to abandon his own poor organized avirace run roughshod country? Can he see no better re criticism of the President's r that he belongs to a particular

The seventy-third anniversary of New Orleans was duly of New Orleans the 8th.

Horticulture.

KANSAS HORTICULTURE.

Address of G. Y. Johnson, President of the State Horticultural Society, at the recent meeting at Marion.

Twenty years ago a few enterprising, energetic and courageous citizens organized this society amid such difficulties and discouragements as but few are willing to endure. At that time most of the inhabitants were located in a few of the eastern counties which had recently been ravaged by rebels and bushwhackers. Orchard-planting was scarcely begun, while fully one-half of the State was yet in the hands of hostile Indians and trodden by wild buffaloes.

The laurels won by the indefatigable efforts of the early orchard-planters through the auspices of this society during the first ten years of its existence, turned the drift of the fettered class of emigrants and changed the name of our State from a hissing and a by-word to a name that every true Kansan is proud of—to a name that is nowhere lightly spoken, but wherever best known is spoken with pride. No other element aside from its good government has done half so much as this society to redeem the State and make it what it is—the brightest star in the constellation of States.

Horticulture has become a well-settled and profitable industry, far beyond what was at the time of the organization of this society considered the extreme limit to cultivation of the more common cereals. So marked has been the success in our noble calling that settlers have been stimulated to press even beyond the western border of the State, into the adjacent plains of eastern Colorado, and these people, from what I can gather, (from conversing with them), are expecting history to repeat itself, or rather expecting with the same pluck and energy to reap the same results in the next twenty years that you of eastern Kansas have done in the past. They are, many of them, looking to us as a guiding star, and we should not let them look in vain, if we can do anything to help them. In the name of humanity allow me to introduce these western frontier people to your kindly consideration. The worst cases are where there is absolutely no timber, and where corn and cornstalks won't grow, and the leading elements of fuel being sunflowers and cow-chips.

A manual upon the culture of forest trees adapted to that locality might be one of the very best things that could be done for these people; but when, O, when is the committee of sufficient experience or discernment to write such a digest and be sure of making no mistake? A document of this kind containing errors might do more harm than good, beside bringing the good name of our society down from its present high standard. While I think something of this sort ought to be undertaken, it should not be done without care for the good name of our society. If these people can only make a success of forestry, that will be one of the greatest aids to other departments of horticulture, and the making of desirable homes, without which no country can be popular and no State desirable. I speak more freely in behalf of these people, because of my own medium ground between them and most of you whose faces I see before me.

The question of our insect enemies should not be either overlooked or abandoned by you; but the work upon the legislative department of our government ought to be pushed in the future even if possible with more vigor than in the past, until success may

crown our efforts with a State Entomologist.

The subject of our last past light fruit crop is one worthy of our most searching inquiry, and if the true cause can be rightly determined and a remedy devised it may be very gratifying to us in the future whenever like circumstances again occur.

I would, however, suggest that we may have but little cause to grumble at our light fruit crop, because, have we not our trees left? Three months ago I visited a gentleman to whom I had sold three hundred apple trees about eighteen years ago. All that was left was Rawles Janet, Willow-Twig, Tallman's Sweet, Fameuse, and a summer variety undetermined; these, however, were well loaded; the Winesap, Ben Davis, and other popular sorts being all gone, yet the owner said this orchard had paid him well and he was going to plant another. Then why should we be in the least discouraged?

I have recently been told by a gentleman who visited the interior and dry regions of Russia of finding therein one instance an orchard of twelve thousand apple trees, with well and water tanks at the highest points from which each tree was twice watered during each summer, he thought about one and one-half barrels of water to each tree, about June and August, the first, accompanied by a system of mulching to retain the moisture. That plan might be of use to us in Kansas.

Within the last few months I also met a gentleman from Arizona who is perfecting a system of sub irrigation through pipes laid one foot or more below the surface of the ground, the claim being that water can be let out in small quantities as desired to the roots of trees or other growing plants, and that more than twice as much water would be necessary when applied to the surface of the ground.

All these questions of applying and retaining moisture in the soil are questions that you should carefully study, so that correct conclusions may be arrived at; yet after these questions are settled it may be found that moisture in the atmosphere is a more valuable element to the horticulturist than moisture in the soil.

HORTICULTURE CONNECTED WITH FARMING.

Address of Mr. Reynolds, delivered before the State Horticultural Society, at the December meeting, 1887.

It is here in Kansas, where the climate is genial, the soil fertile, and the people industrious and intelligent, that agriculture as a science, and horticulture as an art, are destined to reach the highest form of development and perfection of which they are capable. Every variety of the natural products of the soil, from those of semi tropical growth and luxuriance, to the simple blossoms of the borders of the snow line are found in this favored land.

While horticulture may very properly be dissociated from farming when it is made a specialty—when new varieties are to be propagated and tested, when experiments involving much time and expense are to be made, and when tender and expensive plants are to be reared; nevertheless, horticulture in the common acceptance of the term, when it implies the production of fruits and vegetables for the health and comfort of the family, including, possibly, enough shrubs and flowers for home adornment, then farming should never be separated from horticulture. The divorce would be fraught with only privation and misfortune to the farmer. For this union many reasons have already been presented to this society at former meetings, and more could be

given whose logic and force cannot be questioned.

When every farmer shall become a horticulturist in the true sense of the term, then Kansas will be distinguished for her beautiful homes, for the intelligence, integrity, and morality of her people; and this once wilderness of prairie will be made to blossom as the rose, and will become, in reality, a terrestrial paradise.

Will it pay? is a question which is always interesting to the American mind, and sometimes paramount to all others. Will horticulture connected with farming pay? In answering this question, allow me to present a few facts which came under my notice the past season. As "facts are stubborn things and figures never lie," and as I speak "by the card," why, I am sure, you will give me your attention for a short space of time. I know an industrious farmer living in my township, who, the last season, raised wheat, oats, corn and potatoes, and he cultivated all passably well. In consequence of the drought and chinch bugs, his wheat was a failure; his oats were only fair; his corn only nubbins, and not many of them; and his potatoes did not more than pay the cost of seed, digging and marketing. As he had no orchard, no small fruit, and no horticultural products to sell, his income, as may be seen, was reduced to the lowest minimum, and himself and family reduced to much privation, or driven into debt. Now, I take it, this farmer is but one of many in Kansas, and might be called a representative of a large class.

Not much more than a mile from the farmer just mentioned, was another with no better land, no better weather, and no better farm crops; but he possessed a fine orchard which was full of good fruit. I visited this orchard in the last week of August, and could but admire the fine crop of Jonathans, Ben Davis, Missouri Pippins, and other leading varieties. In short, the income from this orchard, which was not over ten acres, was sufficient to keep his family in comfort a whole year. This man, I am happy to say, is also a representative of another class—a class which connects horticulture with farming. Ask him if it pays?

One year ago I gathered and sold from a five-acre orchard planted in 1858, some 200 barrels of fall and winter apples, besides several wagon loads of summer and cider apples, the whole amounting to a sum equal to the value of fifty acres of other crops grown on the same farm the same year. I can add my testimony to many others that horticulture connected with farming will pay in dollars and cents.

As it is the intention to make this paper entirely practical, ignoring all theory and speculation, I will present a few suggestions to those intending to plant fruit, as well as to those already owning apple orchards and other kinds of fruit. Having had occasion to visit a great many orchards the past season, for the purpose of collecting fruit for display at the two great fairs of Kansas, the Western National at Bismarck Grove, and the State fair at Topeka, I will now present the result of some observations made on the several orchards visited.

Where trees were given plenty of room, say from thirty to forty feet apart, the fruit was larger and the trees generally in better condition. The opposite was true of orchards where trees stood from twenty to twenty-five feet apart. In such orchards the fruit was small and the trees in a sickly condition. In such orchards the limbs and branches interlock, preventing a sufficiency of sun and air to color and ripen up the fruit. As the roots spread equal to the

branches they also interlock each other, thus reducing the plant food for each tree almost or quite 50 per cent. It is, therefore, recommended to plant apple trees not less than from thirty to forty feet apart.

It was noticed that orchards that were kept plowed, and the ground well stirred between and around the trees, suffered less from drought, and dropped their fruit less than trees in neglected orchards. The only way to continue bearing apple trees healthy, vigorous, and fruitful, is by giving them full possession of the land, good cultivation, and supplying a sufficient quantity of manure to keep up the fertility of the soil. The neglect to meet the requirements is, in my opinion, the main cause of the premature decay of many of our old orchards. Decaying trees at twenty years old, with proper treatment, ought to have been in their prime at twice that age. Mr. Goodman, Secretary of the Missouri State Horticultural Society, strongly emphasized this fact at the October meeting of the Missouri Valley Society. He stated that bearing orchards in Missouri were suffering and decaying for want of cultivation and fertility. He said that no other crop should be planted in the bearing orchard, not even clover, for it extracted more from the soil than it returned. The few orchards that he found well-cultivated and cared for stood the drought well, and bore comparatively good fruit. I was more than ever confirmed in my opinion, previously expressed before this society, of clean culture for the bearing orchard.

Another great damage to the trees, and one that has often been referred to, is the practice of turning hogs into the orchard. I have known several fine orchards to be completely ruined by this practice; and the owners are generally unwilling to admit the evil until too late to apply the remedy. I have in mind an orchard bearing fine fruit two years ago. Since then a large number of pigs and hogs has been kept there rooting up the ground, exposing the rootlets to the scorching rays of the sun, tramping the soil when wet, and packing it as hard as the traveled highway; besides the injury done to the trunks of the trees by rubbing and chafing the bark. When I visited this orchard last summer expecting to get fine specimens, as before, of the Porter, Dominie, Maiden's Blush, and other sorts, not a specimen worth gathering could be found. While young pigs well-rung may not do much damage in the orchard, the safer and better plan is to exclude them all, and cultivate the soil with better implements.

The varieties that appear to be doing the best in the eastern part of the State are the Jonathan, Maiden's Blush, Huntsman's Favorite, Ben Davis, Rome Beauty, and Missouri Pippin, all of which are good bearers and very marketable. Several other sorts are doing passably well. Of varieties that are unsuitable for our climate and that are either failing to bear fruit, or are dying out, may be mentioned the King of Tompkins County, Grimes' Golden, Winesap, Yellow Bellflower, and Romanstem. These varieties are referred to as having come under my especial notice the past season.

Of strawberries the Crescent, fertilized with the Downing, stands first for production; the Miner first for size and beauty, and the May Queen for sweetness and richness of flavor. For full information relating to the strawberry and its culture, and other berries, read the report of Mr. B. F. Smith, committee on small fruits.

Of grapes I found the Concord still the favorite, and maintaining its claim to be the grape for the million. In Douglas county most of the old

cherry orchards are dead and gone. In order to keep up the supply of this fruit, the farmer must "keep on planting." The successful varieties are the Early Richmond and English Morello.

The Snyder blackberry was found to be the general favorite on account of its hardiness and freedom from summer or winter-killing. Of all the kinds and varieties above recommended the farmer should have a full supply for his own family, with some to spare.

There is one class of farmers to which I would particularly appeal. I mean that class known as stock-raisers. As a rule they are well-to-do farmers and abundantly able to supply themselves with the necessities and luxuries of a good garden and orchard. But it is a notorious fact, as a rule, horticulture has no claims on their attention. All their efforts are bent in the direction of the development of the fine points of an animal. Neither time nor expense is spared in bringing an animal to perfection, while there is no care of, nor taste for, the production of luscious fruits and health-giving vegetables. It is all right for farmers to be specialists in their particular lines of production; but no farmer can afford to deprive himself and family of the benefits and blessings of the garden and orchard, when those benefits are so readily acquired.

It may be that some farmers are deterred from growing fruits on account of the many enemies which attack and prey upon it. But are not agricultural products quite as subject to insect attacks as fruits and vegetables? Wheat is subject to the weevil, rust, the chinch bug, and the Hessian fly; oats are liable to rust, or to be destroyed by the chinch bug; corn is often cut short by drought and chinch bugs, and the potato plant is often eaten by the Colorado bug. What sensible farmer would cease to sow and plant in consequence of these contingencies?

The horticulturist, however, is not without his friends, and they are legion. The birds are his friends, keeping in check myriads of destructive insects. Many of the insects themselves are friendly, preying upon others that are enemies of plant life. Even toads and frogs are allies of the gardener, helping, as they do, to destroy worms, bugs and slugs. It is a great mistake to consider them injurious to the garden, or in any sense as being poisonous. They are not only harmless, but decidedly useful. Although they are now taking their long winter nap, in a few weeks they will come among us and make the welkin ring with their nocturnal music. Finally the Giver of all good gifts who "fillet all things living with plenteousness," and has promised that "seed time and harvest, summer and winter shall continue to the end of time," is the best of all friends, supplying every needful thing except our own efforts.

Salt Rheum

With its intense itching, dry, hot skin, often broken into painful cracks, and the little watery pimples, often causes indescribable suffering. Hood's Sarsaparilla has wonderful power over this disease. It purifies the blood and expels the humor, and the skin heals without a scar. Send for book containing many statements of cures, to C. I. Hood & Co., Apothecaries, Lowell, Mass.

Many swine-breeders regard a solid earth floor the best for a pig pen. It must be high enough to be readily drained, so as to be dry at all times. It is also customary with some breeders to remove from six to eight inches of these earth floors every spring, drawing the manure-soaked earth on to the fields and renewing the floor with fresh earth.

The Poultry Yard.

Points and Breeds.

EDITOR KANSAS FARMER:—I am glad to see the interest manifested in the poultry department, but I notice there are some who are not studying the standard very closely. For those that do not sell for pure-blood it does not make so much difference, but when a man advertises and sells at a good price, a person expects to have fowls that will compare favorably with any he may run in competition with. Having been in the business for twelve years, I have seen some fowls shipped that gave utter disappointment, which soon cools the interest of the beginner. If I had a Leghorn rooster with a comb that measured five inches, I should consign him to the pot. We all know that a large comb and wattles are in the way and are only fit for a hot-house, for no chicken will lay with a frozen comb. That is why they have bred Leghorns with a rose-comb. But I prefer a single comb with medium-sized comb and wattles, and keep them in the hen-house during the cold days. If properly taken care of they will give good result in winter as well as in the summer. Poultry pays as well, if properly taken care of, as anything on the farm. There is no one breed that is perfection. Some are best for one purpose, some for another. Then again one tires of seeing the same chickens year after year; so most of us change from one breed to another, and when one gets a fine specimen at a fair price he takes extra pains for awhile and gets extra results, and is apt to conclude that is better than our old stock, when sometimes it is only the extra care. But extra care always pays in the end; for you soon learn their peculiarities and consequently their wants, and when both are cared for you get good results.

M. W. WATMIRE.
Carbondale, Osage Co., Kas.

Imported Eggs.

The improvements that are made in methods of transportation is the striking feature of this nineteenth generation. In future history it will probably be called the "transportation age," owing to the immense improvements that we have added to the comforts of the human family in this direction. The progress of our country is in a great measure due to the facilities with which one part of the country can communicate with the other. The effect of this has been that droughts and famine in one section is met by the more abundant crops of another. The Western farmers, where land is cheap, and population scarce, have reaped a rich benefit from the conveniences they have for reaching the more thickly populated sections of the East and of Europe. This is particularly noticed with such crops as wheat, corn, and the products of general agriculture, such as hogs, beaves, and dairy goods.

When we come to consider the smaller products of the farm that require more patience and minute attention, this new force of improved methods of transportation, the ultimate outlook may not be so discouraging. There are many articles of consumption gathered from the farm that are now superior in quality as produced in the old country, but most of them are consumed in such small quantities that the American farmer scarcely feels the competition. With the egg and poul-

try industry, the question is still an open one.

An article from the *New York Herald*, quoted in last week's *American Dairyman*, causes us to pause and think a minute. In 1884 there were 14,400,000 eggs imported into this country, and in 1885 this amount was raised to 18,720,000. Last year the price of eggs fell so low that home competition seems to have checked importation. It looks as though the hens of the country had heard of this new rival and concertedly agreed to lay themselves out, as the horse men say, and they drove their competitors temporarily from the field. According to the *Herald* there is an avalanche of eggs always on hand in the densely-populated countries of Europe, ever ready to be launched upon us when the prices in our market will warrant the venture.

We learn, too, that this egg industry is only just now getting into successful operation on the other side. The arrangements are now being perfected for gathering eggs from Norway, Sweden, Russia, Germany, Austria, Galicia, Bulgaria, Italy, and Belgium, with all the lines centering on Antwerp, where the steamers are to start for this country when the word is given. The modus operandi is thus described: The commission merchant in New York watches the market, and when the surplus is short and prices on the rise, he cables across to Antwerp, and instantly the telegraph lines are made hot with dispatches to agents in all the aforesaid countries, and the farmers' wives begin to scurry around gathering up the eggs, while all the idle steamers hurry to Antwerp for the cargoes, which reach this country much quicker than under the present system, by which eggs can be gathered in the West and South and shipped by rail to New York.

All of this simply emphasizes our remarks in last week's issue in support of Mr. Anderson's report on the egg industry to the National B. & E. Association. He then calls loudly for organization and better methods in collecting and handling eggs, and according to the signs of the times, his warning had better be heeded. While it may be true that the individual egg can be produced on a Western or Southern farm cheaper than it can be in Europe, yet, as the spokesman of the *Herald* says, wherever there are civilized people there are hens, and it is always the rule that where there are the most people there are the most hens, barring, of course, the central parts of large cities. Where people are thickest it is easiest to collect the eggs, and thus the densely-populated sections of Europe have the advantage of us. At present, ocean freights on eggs are so high, that when the market prices here fall below 18 or 20 cents per dozen, it does not pay to import them, but what day will these freights be lowered? A little improvement in the machinery of vessels may do this. Let those most interested in this matter think it over, for we have a lion at our door.—*American Dairyman*.

At the exhibition of the American Poultry Breeders' Association, held at Chicago, Ill., November 8, to 18, 1887, Mr. C. H. Rhodes, of North Topeka, Kas., was awarded several prizes from the awarding committee, as follows: On Black Cochins—cock 1st, pullet 1st, 2nd, 4th, and 5th; breeding pen 1st; display 1st.

"EDITOR'S BACK STAIRS."

The Interesting Views of the Late Dr. J. G. Holland.

The columns of the newspapers appear to be flooded with proprietary medicine advertisements. As we cast our eye over them, it brings to mind an article that was published by the late Dr. Holland in *Scribner's Monthly*. He says: "Nevertheless, it is a fact that many of the best proprietary medicines of the day were more successful than many of the physicians, and most of them, it should be remembered, were at first discovered or used in actual medical practice. When, however, any shrewd person, knowing their virtue, or foreseeing their popularity, secures and advertises them, then, in the opinion of the bigoted, all virtue went out of them."

Is not this absurd?

This great man appreciated the real merits of popular remedies, and the absurdity of those that derided them because public attention was called to the article and the evidence of their cures. If the most noted physician should announce that he had made a study of a certain organ or disease of the body, or make his sign larger than the code size, though he may have practiced medicine and been a leader in all medical counsels, notwithstanding all this, if he should presume to advertise and decline to give his discovery to the public, he would be pronounced a quack and a humbug, although he may have spent his entire life and all his available funds in perfecting his investigations.

Again we say, "absurd."

If an ulcer is found upon one's arm, and is cured by some dear soul of a grandmother, outside of the code, it will be pronounced by the medical profession an ulcer of little importance. But if treated under the code, causing sleepless nights for a month, with the scientific treatment, viz., plasters, washes, dosing with morphine, arsenic and other vile substances, given to prevent blood poisoning or deaden pain, and yet the ulcer becomes malignant, and amputation is made necessary at last, to save life, yet all done according to the "isms" of the medical code, this is much more gratifying to the medical profession, and adds more dignity to that distinguished order than to be cured by the dear old grandmother's remedy.

This appears like a severe arraignment, yet we believe that it expresses the true standing of the medical profession in regard to remedies discovered outside of their special "isms." One of the most perplexing things of the day is the popularity of certain remedies, especially Warner's safe cure, which we find for sale everywhere. The physician of the highest standing is ready to concede its merits and sustain the theories the proprietors have made—that is, that it benefits in most of the ailments of the human system because it assists in putting the kidneys in proper condition, thereby aiding in throwing off the impurities of the blood, while others with less honesty and experience decide, and are willing to see their patient die scientifically, and according to the code, rather than have him cured by this great remedy.

Yet we notice that the popularity of the medicine continues to grow year by year. The discoverer comes boldly before the public with its merits, and proclaims them from door to door in our opinion much more honorably than the physician who, perchance, may secure a patient from some catastrophe, and is permitted to set a bone of an arm or a finger, which he does with great dignity, yet very soon after takes the liberty to climb the editor's back stairs at 2 o'clock in the morning to have it announced in the morning paper that "Dr. So-and-so was in attendance," thus securing for his benefit a beautiful and free advertisement.

We shall leave it to our readers to say which is the wiser and more honorable.

The fine plates and machinery in the Bureau of Engraving and Printing are being ruined by the gritty dust blown from the wagons that are being used in filling in around the Washington Monument.

Mustang Liniment

MEXICAN MUSTANG LINIMENT, applied vigorously is death to rheumatism, neuralgia, Sore Backs!

Mustang Liniment

MEXICAN MUSTANG LINIMENT cures all ailments of HORSES, MULES and CATTLE. Outward-treatment.

Mustang Liniment

MEXICAN MUSTANG LINIMENT, for MAN and BEAST. Greatest Curative discovery ever made.

Mustang Liniment

MEXICAN MUSTANG LINIMENT should always be kept in HOUSE, STABLE and FACTORY. Saves loss!

CREAM OF A WEEK'S NEWS.

Cholera is reported in Valparaiso, South America.

Nevada, Mo., raised the saloon license fee to \$1,200 a year.

The Illinois Central railroad is selling 1,000 mile tickets for \$20.

General E. S. Bragg is nominated by the President as Minister to Mexico.

A man was frozen in Dakota near Grand Forks. He was exposed in a storm.

Senator Beck, of Kentucky, succeeds himself in the Senate. He is elected Senator the third time.

A small herd of sixty-one buffalo were driven into southwestern Kansas by a prairie fire in No-Man's-Land.

The President called attention to the suffering condition of Indians on Round Valley reservation, California.

Employees of Hubbard & Co., axe manufacturers at Pittsburg, Pa., struck against reduction of ten per cent. in wages.

The Kansas City Board of Trade adopted a resolution in favor of a convention of citizens of Missouri and Kansas to consider the opening of Oklahoma territory.

The mining men of Montana are becoming alarmed over the fact that a vast majority of the public land in the Territory is being classed by United States surveyors as agricultural, thus allowing it to be claimed by the Northern Pacific railway, under their grant.

The authorities at Sioux City, Iowa, refuse to issue wholesale liquor licenses in that city this year. Besides three regularly established wholesale houses which have done a business of thousands of dollars a year, there were applications filed by a number of parties who eventually contemplated going into business solely to evade the prohibitory law.

A Washington, Pa., dispatch, says: The citizens of Zoliarville and vicinity are considerably exercised over a discovery on the farm of Simon Bone. Smoke was noticed several days ago issuing from the ground, and in order to ascertain its origin, a number of neighbors assisted in making excavations. When only a few feet down the ground became so hot that the men had to quit digging. It is stated that hot pieces of clay were thrown up and that the smoke has become very dense.

Judge Krekel, in the United States District court at Kansas city, rendered an important decision. The case was one in which Chas. B. Hudson had shipped 378 steers from Bennington, Kas., with orders to have them in the Kansas City stock yards the next day in time for the markets. The Union Pacific railroad guaranteed to do this, but failed to comply with the contract and the cattle were sold the next day when the market was dull, at a loss of \$766. Hudson sued and recovered the money.

The Railway Age publishes a list of railroad foreclosures in the United States during the year 1887, showing that thirty-one different railways, aggregating 478 miles, representing an apparent capital invested of \$328,000,000, were sold in bankruptcy during 1887. The Age says: "It is remarkable that while by far the greater part of the railway building has been carried on in the wild and presumably reckless West, the old, conservative and wealthy Eastern States of New York and Pennsylvania furnished nearly one-third of the roads that had to be closed out during the year, while none of the States in the West or South make such a showing of reckless or unfortunate management."

At Savannah, Ga., Judge Speer, in his charge to the grand jury of the District court of the United States, called attention to the conflict between the legislature of the United States and the liquor laws of the State of Georgia. Under the State laws the sale of liquor is prohibited in certain counties of the State, and the Internal Revenue Department of the United States issues licenses for the liquor traffic in these same counties. Judge Speer suggested to the grand jury that they address the representatives of Georgia in Congress to propose legislation excepting from the operation of the internal revenue tax laws relating to liquor all places where the local law prohibits traffic in liquors.

Catarrh Cured.

A clergyman, after years of suffering from that loathsome disease, catarrh, and vainly trying every known remedy, at last found a prescription which completely cured him and saved him from death. Any sufferer from this dreadful disease sending a self addressed stamped envelope to Prof. J. A. Lawrence, 212 East 9th St., New York, will receive the receipt free of charge.

A cool cellar aired on a warm day will gather moisture. To avoid this open the windows in the evening.

CHICAGO.

JAMES H. CAMPBELL & CO., Live Stock Commission Merchants, FOR THE SALE OF CATTLE, HOGS AND SHEEP.

Rooms 23 and 24, Exchange Building, } Unequalled facilities for handling consignments of stock in either of the above cities. Correspondence invited. Market reports furnished free. Refer to Publishers KANSAS FARMER.

Now that sorghum is once more attracting the attention of farmers throughout the country and has this time apparently come to stay, it is well to know that the Sorghum Hand Book, a valuable treatise on the cultivation and manufacture of Sorghum, may be had free of charge on application to the Blymyer Iron Works, Co., Cincinnati, O.

Woven Wire Fencing.

If you are looking for a first-class fence, read the advertisement of McMullen Woven Wire Fence Co., of Chicago, and see what they offer. It will pay you to write them for full particulars. Their fencing is peculiarly adapted to almost any place about the home or farm, and if you are looking for something good in this line this particular fence may be just what you want.

Farm Loans.

Loans on farms in eastern Kansas, at moderate rate of interest, and no commission. Where title is perfect and security satisfactory no person has ever had to wait a day for money. Special low rates on large loans. Purchase money mortgages bought.

T. E. BOWMAN & Co.,

Jones Building, 116 West Sixth street, Topeka, Kas.

Doubt No Longer.

That able and veteran agricultural writer and weather student, J. C. H. Swann, is writing the second edition of his book, which is the result of records of weather and crops from 1847—over half a century. His articles in the KANSAS FARMER and other papers and the book for six years are proof positive that he is correct in saying what the future crops will be, also the character of the seasons to come. There will be arranged complete rules by which you can read what the future years will be so long as you will need information in that direction. It has much other information of value. This book will prove a grand, happy and useful surprise to all who order it. Citizens of townships who club an order, fifty or more copies at once, should write at once and learn terms. If you can't send money now, send your address, and be ready when the book is. It will be ready the 1st of March, 1888, and all men need it who have homes. Price \$1, postpaid. Address Nell Wilkie's Bank, Douglass, Butler Co., Kas.

THE MARKETS.

By Telegraph, January 9, 1888.

LIVE STOCK MARKETS.

St. Louis.

CATTLE—Receipts 1,000, shipments 600. Market steady. Choice heavy native steers \$4 40 to \$5 10, fair to good steers \$3 80 to \$4 45, medium to choice butchers steers \$3 10 to \$4 00, fair to good stockers and feeders \$2 00 to \$3 10.

HOGS—Receipts 4,000, shipments 1,700. Market active and higher. Choice heavy and butchers selections \$5 50 to \$5 75, medium to prime packing and yorkers \$5 20 to \$5 60, ordinary to good light grades \$4 90 to \$5 20.

SHEEP—Receipts 300, shipments 200. Market firm. Fair to choice \$3 25 to \$4 30.

Chicago.

The Drovers' Journal reports:

CATTLE—Receipts 12,000, shipments 4,000. Market steady. Beef steers, \$3 00 to \$3 15; stockers and feeders, \$2 00 to \$2 40; cows, bulls and mixed, \$1 75 to \$2 10; Texas cattle, \$1 95 to \$2 00.

HOGS—Receipts 23,000, shipments 7,000. Market strong and a shade higher. Mixed, \$5 15 to \$5 60; heavy, \$5 50 to \$5 85; light, \$4 70 to \$5 45; skips, \$3 50 to \$4 05.

SHEEP—Receipts 4,000, shipments 1,000. Slow. Common to choice, \$2 75 to \$3 85; Western, \$3 50 to \$4 80; Texans, \$2 50 to \$3 50; lambs, \$4 50 to \$5 00.

Kansas City.

CATTLE—Receipts 783. The quality of the offerings to day was mostly common and the market strong and a shade higher or cows and steady on dressed beef and shipping. Sales ranged \$3 60 to \$4 25 for butcher and shipping steers.

HOGS—Receipts since Saturday 5,000. Taking the quality into consideration the market was 50 to 100 higher. Extreme range of sales \$3 55 to \$5 55, bulk at \$5 20 to \$5 30.

SHEEP—Receipts since Saturday 246. Sales:

81 muttons av. 102 lbs. at \$1 40, 105 muttons av. 81 lbs. at \$3 50, 60 muttons av. 70 lbs. at \$3 60.

PRODUCE MARKETS.

St. Louis.

FLOUR—Dull, and lower to sell. WHEAT—Opened a little lower and fairly lively; the market fluctuated but little, closing steady and a little lower than Saturday. No. 2 red, cash, \$2 40; January, \$2 40 asked. CORN—Weak and lower. Cash, \$1 40 to \$1 45; January, \$1 40 to \$1 45.

OATS—Lower. Cash, \$1 30 to \$1 35. RYE—Strong at 65c. BARLEY—Firm at 70c to 75c.

Chicago.

Cash quotations were as follows: FLOUR—Quiet and unchanged. WHEAT—No. 2 spring, 76c to 77c; No. 3 spring, 70c to 71c; No. 2 red, 82c. CORN—No. 2, 48c to 49c. OATS—No. 2, 31c to 32c. RYE—No. 2, 62c. BARLEY—No. 2, 73c to 74c. FLAXSEED—No. 1, \$1 43. TIMOTHY—Prime, \$3 40 to \$3 45.

Kansas City.

WHEAT—Receipts at regular elevators since last report, — bushels; withdrawals, 2,500 bushels, leaving stock in store as reported to the Board of Trade to-day, 378,576 bushels. There was a steady and merely nominal market on 'change to-day, with no sales on the call, either for cash or future delivery of any of the different grades. No bids nor offerings either for rejected winter, No. 4 winter, No. 3 red winter or No. 3 soft winter wheat. No. 2 soft winter, none on the market. No. 2 soft winter—cash, no bids, 85c asked. On track by sample: No. 2 soft, cash, 82c.

CORN—Receipts at regular elevators since last report, 8,104 bushels; withdrawals, — bushels, leaving stock in store as reported to the Board of Trade to-day, 100,808 bushels. The market was weak on 'change to-day. On the call the only sale was No. 2 January at 44c in special elevator, against 44c asked regular on Saturday. On track by sample: No. 2 cash, 44c.

OATS—No. 2 cash, no bids, 29c asked. On track by sample: No. 2 mixed, cash, 30c; No. 2 white, cash, 31c.

RYE—No. 2 cash, no bids nor offerings.

HAY—Receipts 11 cars. Strictly fancy is

steady at \$2 50 for small baled; large baled, \$2 00; wire-bound 50c less.

OIL—Per 100 lbs. sacked, f. o. b., \$1 25;

\$1 00 per 1,000 lbs.; \$2 00 per ton; car lots, \$1 00 per ten.

SEEDS—We quote: Flaxseed, \$1 05 per bu. on a basis of pure; castor beans, \$1 00 for prime.

FLOUR—Market firm. Sales: 1 car XX at 95c on orders. Quotations are for unestablished brands in car lots, per 1/2 bbl. in sacks, as follows: XX, 90c; XXX, \$1 00 to \$1 05; family, \$1 15 to \$1 25; choice, \$1 50 to \$1 60; fancy, \$1 65 to \$1 70; extra fancy, \$1 75 to \$1 80; patent, \$2 05 to \$2 10; rye, \$1 40 to \$1 50. From city mills, 25c higher.

BUTTER—Receipts of roll large and market

steady. We quote: Creamery, fancy, 27c; good, 22c to 25c; fine dairy in single package lots; 10a20c; storepacked, do., 14a16c for choice; poor and low grade, 9a10c; roll, good to choice, 13a16c.

CHEESE—We quote: Full cream, twins, 18c;

full cream, Young America, 13c.

EGGS—Receipts large and market steady at 18c per dozen for fresh.

VEGETABLES—Potatoes, home-grown, 60a 70c per bus.; Utah, 90a to \$1 00 per bus. Onions, red, 75a to \$1 00 per bus.; California, \$1 10 per bus. Sweet potatoes, yellow, 75c per bus. Apples, supply fair and market steady at \$2 00 to \$3 00 per bbl.

BROOMCORN—We quote: Green self-working, 4c; green husk, 4c; green inside and covers, 2 1/2a3c; red-tipped and common self-working, 2c; crooked, 1c.

PROVISIONS—Following quotations are for round lots. Job lots usually 1/4c higher. Sugar-cured meats (canned or plain): Hams 11c, breakfast bacon 10 1/2c, dried beef 9c. Dry salt meats: clear rib sides \$7 80, long clear sides \$7 70, shoulders \$5 95, short clear sides \$5 05. Smoked meats: clear rib sides \$5 55, long clear sides \$5 45, shoulders \$5 05, short clear sides \$5 80. Barrel meats: mess pork \$15 00.

Topeka Markets.

PRODUCE AND PROVISIONS—Corrected weekly by W. W. Manspeaker & Co., 711 Kansas avenue. (Wholesale prices).

Butter, per lb.	20a 25
Eggs (fresh) per doz.	19a 20
Beans, white navy, H. P., per bus	2 50
Sweet potatoes	60a
Apples	75a 00
Potatoes	60a 95
Onions	1 00a 25
Beets	40a
Turnips	25a 35

HAGEY & WILHELM, WOOL AND BROOMCORN Commission Merchants

—ST. LOUIS, MO.—

REFERENCES:—KANSAS FARMER Co., Topeka, Kas.; Boatmen's Bank, St. Louis; Dunn's Mercantile Reporter, St. Louis; First National Bank, Beloit, Kas.

We do not speculate, but sell exclusively on commission.

Kansas City Stock Yards,

KANSAS CITY, MISSOURI,

Are by far the most commodious and best appointed in the Missouri Valley, with ample capacity for feeding, weighing and shipping cattle, hogs, sheep, horses and mules. No yards are better watered and in none is there a better system of drainage.

Higher Prices are Realized

Here than in the markets East. All the roads running into Kansas City have direct connection with the Yards, which thus afford the best accommodations for stock coming from the great grazing grounds of Texas, Colorado, New Mexico and Kansas, and also for stock destined for Eastern markets.

The business of the Yards is done systematically, and with the utmost promptness, so that there is no delay and no clashing, and stockmen have found here, and will continue to find that they get all their stock in worth, with the least possible delay.

Kansas City Stock Yards Company Horse and Mule Market.

FRANK E. SHORT.

CAPT. W. S. TOUGH.

F. E. SHORT & CO.

Managers.

This company has established in connection with the Yards an extensive Horse and Mule Market, known as the KANSAS CITY STOCK YARDS COMPANY HORSE AND MULE MARKET. Have always on hand a large stock of all grades of Horses and Mules, which are bought and sold on commission, by the head or in carload lots.

In connection with the Sales Market are large feed stables and pens, where all stock will receive the best of care.

Special attention given to receiving and forwarding. The facilities for handling this kind of stock are unsurpassed at any stable in this country. Consignments are solicited, with the guarantee that prompt settlements will be made when stock is sold.

C. F. MORSE,
General Manager

E. E. RICHARDSON,
Secretary and Treasurer.

H. P. CHILD,
Superintendent.

THE STRAY LIST.

HOW TO POST A STRAY.

THE FEES, FINES AND PENALTIES FOR NOT POSTING.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

FOR WEEK ENDING DEC. 29, 1887.

Greenwood county—J. W. Kenner, clerk.

STEER—Taken up by John Pegram, in Lane tp., November 5, one red yearling steer, four white feet and white on belly, bush of tall and face white, no marks or brands; valued at \$12.

STEER—By Robert Wiggins, in Bachelor tp., November 8, one red yearling steer, no marks or brands; valued at \$15.

STEER—By same, one white yearling steer, no marks or brands; valued at \$15.

STEER—By C. E. Freeman, in Janesville tp., December 23, one 2-year-old red steer with white spots and white hind legs.

STEER—By same, one 2-year-old steer of a light roan color, tips of both ears cut off, no distinct brand.

Brown county—G. I. Prewitt, clerk.

STEER—By J. W. Gordon, in Mission tp., December 6, one white and red steer, 2 years old, no marks or brands visible; valued at \$25.

Kingman county—J. J. Stevens, clerk.

HEIFER—By David Gillespie, in Ninescah tp., December 1, one spotted roan heifer, no marks or brands; valued at \$10.

Decatur county—R. W. Finley, clerk.

HORSE—By J. N. Patton, in Cook tp., one gray horse, 10 years old, weight 1,100 pounds, no brands; valued at \$40.

Atchison county—Chas. H. Krebs, clerk.

MULE—By John Sauer, in Kaploma tp., (Arrington P. O.), November 12, one bay mare mule, 1 year old, large size; valued at \$60.

STEER—By J. D. Armstrong, in Grasshopper tp., (P. O. Effingham), December 12, one dark red steer, white spots on belly, about 2 years old; valued at \$15.

Johnson county—Henry V. Chase, clerk.

HORSE—By T. L. Horner, in Shawnee tp., one black horse, about 9 years old, 15½ hands high, three white feet, saddle and collar marks, star in forehead; valued at \$40.

HORSE—By same, one chestnut sorrel horse, four white feet, blaze face, right hip down, knee enlarged, 15½ hands high, 15 years old, saddle and collar marks; valued at \$15.

Cherokee county—L. R. McNutt, clerk.

COLT—By G. R. King, of Spring Valley tp., one 2-year-old light bay mare colt; valued at \$50.

COLT—By same, one 1-year-old dark bay horse colt; valued at \$35.

Ellis county—Henry Oshant, clerk.

COW—Taken up by C. A. Mayhew, in Logan tp., December 1, one red cow, 4 years old, no other marks or brands; valued at \$15.

Labette county—W. W. Cook, clerk.

STEER—By J. S. Wimmer, in Elm Grove tp., December 5, one red 1-year-old steer, two mingled red and white spots on left side; valued at \$12.

FOR WEEK ENDING JAN. 5, 1888.

Osage county—R. H. McClair, clerk.

STEER—Taken up by James Mabon, in Burlingame

tp., December 6, 1887, one red-roan 2-year-old steer, no marks or brands; valued at \$15.

COLT—By M. C. Peyton, of Scranton, November 21, 1887, one mouse-colored Texas mare colt, 1 year old; valued at \$10.

COLT—By same, one 2-year-old Texas mare colt, left hind foot white, branded R; valued at \$20.

COLT—By same, one 3-year-old Texas mare colt, four white feet, branded R; valued at \$20.

STEER—By James McAllen, of Scranton, November 21, 1887, one red 2-year-old steer, no marks or brands; valued at \$15.

Jefferson county—E. L. Worswick, clerk.

STEER—By V. F. Newell, of Osawatie, December 9, 1887, one pale red 2-year-old steer, branded M on right hip, slit in right ear and under-bit in left ear; valued at \$20.

Douglas county—Joel S. White, clerk.

STEER—By Jesse Whitman, in Marion tp., December 7, 1887, one 3-year-old red steer, branded on left hip; valued at \$20.

Woodson county—L. M. Jewett, clerk.

STEER—By S. C. Gaston, in Toronto tp., November 29, 1887, one brindle 3-year-old steer, branded T on left horn.

Wilson county—D. N. Willits, clerk.

MARE—By Frank Michael, in Center tp., December 17, 1887, one bay mare, 14 hands high, long body, pony build, star in forehead, gray hairs on neck and head, left hind foot white; valued at \$15.

Pottawatomie county—I. W. Zimmerman, clk.

STEER—By Joseph Degraw, in Mill Creek tp., December 12, 1887, one roan steer; valued at \$14.

HORSE—By S. H. Shaw, in Blue Valley tp., December 14, 1887, one dark brown horse, weight 750 pounds, white strip in face, small white spot on end of nose; valued at \$25.

Coffey county—H. B. Cheney, clerk.

HEIFER—By S. W. Allen, in Liberty tp., November 26, 1887, one 3-year-old heifer, branded M with bar across horizontally; valued at \$15.

Allen county—R. W. Duffy, clerk.

STEER—By John Warfield, in Elmore tp., December 9, 1887, one dark red steer with white under belly, 2 years old; valued at \$20.

Scott county.

PONY—By Wm. O. Brown, in Valley tp., July 18, 1887, one bay pony mare, 7 years old, white spot in forehead, white hind feet, branded on left shoulder; valued at \$25.

E. M. BELL, J. P.

FOR WEEK ENDING JAN. 12, 1888.

Elk county—J. S. Johnson, clerk.

STEER—Taken up by E. C. Sanger, January 3, 1888, one steer, 3 years old, red, with some white on belly, flank and face, brand on left hip, and not distinguishable; valued at \$20.

Jackson county—E. E. Birkett, clerk.

STEER—Taken up by Nicholas Reddy, in Washington tp., November 15, 1887, one red 2-year-old steer, with white face, white under belly, brand on right hip, short tail, no other marks visible; valued at \$15.

Wyandotte county—Wm. E. Connolly, clk.

COW—Taken up by F. W. Dreger, in Shawnee tp., December 7, 1887, one cow, about 10 years old, red sides, back and belly white, tips of horns sawed off, and blind in right eye.

Allen county—R. W. Duffy, clerk.

COW—Taken up by W. T. Woods, in Carlyle tp., December 27, 1887, one red roan cow, 6 years old, clip off right ear, blind in left eye; valued at \$18.

\$25! \$25!

PER ACRE!

TOO CHEAP

I WILL SELL OR TRADE

80 ACRES OF NICE LAND

adjoining the town of Wilmot, Kas. Will trade for Cattle or Sheep. Farm well improved; all under fence, in good condition.

Also a nice stock of

HARDWARE and LUMBER.

Goods all new and in splendid condition. Will sell or trade as above mentioned.

Address Box 9, Wilmot, Kas.

PURE GERMAN CARP FOR SALE.

For stocking ponds. All sizes, from 2 to 10 inches.

Prices on application. J. J. MEASER, Hutchinson, Kansas.

OPIUM AND MORPHINE HABIT CURED

in 10 to 20 days. No pain until cured. Address DR. JAS. J. HOLDFE, 777 LAMBSURG, O.

I CURE FITS!

When I say cure I do not mean merely to stop them for a time and then have them return again. I mean a radical cure. I have made the disease of FITS, EPILEPSY or FALLING SICKNESS a life-long study. I warrant my remedy to cure the worst cases. Because others have failed is no reason for not now receiving a cure. Send at once for a treatise and a Free Bottle of my infallible remedy. Give Express and Post Office. H. G. ROOT, M. C., 183 Pearl St. New York.

TO WEAK MEN

Suffering from the effects of youthful errors, early decay, wasting weakness, lost manhood, etc., I will send a valuable treatise (sealed) containing full particulars for home cure. FREE of charge. A splendid medical work; should be read by every man who is nervous and debilitated. Address, Prof. F. C. FOWLER, Moodus, Conn.

MAN WANTED AS OVERSEER

in a county of over 100 POPULATION. MILLIONS OF SAMPLES to be distributed all over the United States and Canada. OVERSEERS will be employed to oversee the work, and their business will be to hire more help to work in other towns in their county. Samples to be left at every house (to advertise our business). Liberal pay. Write and let us know what wages you would expect to get (CLEAR OF ALL EXPENSES) to oversee the work in your county. The business of overseer will be to superintend the work, and to employ all necessary help; these hands to be guaranteed one year's work in their own and adjoining towns. If your county has no towns of over 100 Population, one man can do the work for one county alone. No experience required, any one can do the work. FULL PARTICULARS sent by mail to those who mean business. None others need apply. EXPENSES ADVANCED. If you accept the work, all samples can be sent to overseer (in large lots) by express as fast as needed. We do not require our help to invest any money in outfit. We have no royalties or trash for them to sell or peddle. Address at once, MANAGER THE L. L. LIBRARY CO., No. 344 BRADFORD BLOCK, CINCINNATI, O.

INTER OCEAN MILLS.

Page, Norton & Co.,

PROPRIETORS,

Topeka, - Kansas.

Manufacturers of the following Popular Brands of Winter Wheat Flour:

WHITE LOAF,

-:-

DIAMOND,

BUFFALO,

-:-

REINDEER,

OWL,

-:-

LONE STAR.

Ask for these Brands and be Happy.

CREAMERY PACKAGE



MFG. CO.,



MANUFACTURERS AND JOBBERS OF

Butter Tubs, Egg Cases,

AND GENERAL

CREAMER

AND DAIRY

SUPPLIES.

We carry a Large Stock of Butter Tubs and Egg Cases in our Warehouse, and can Fill Large Orders Promptly.

We carry a Full Line of Cans, Butter Boxes, Butter Printers, Workers, Churns, Pails, Salts, Coloring, and Everything that is needed in Creameries or Small Dairies.

Our Large Catalogue for 1888, will be out March 15th. All parties that are in the butter and egg business or dairying, will do well to send us their address, and we will forward you our Catalogue when it is out.

Creamery Package Mf'g. Co.

1408 & 1410 West 11th St.,

KANSAS CITY, MO.

The Veterinarian.

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

WEAK FETLOCK.—My neighbor has a colt, 3 years old, that seems to be weak in his front fetlock joints; they double forward when he tries to walk. Is there a remedy? If so, what is it. [A plaster Paris bandage should be applied.]

IN GROWING HORNS.—I have a good cow, whose horns I have cut off once a year, until the last time they bled quite badly; and they are now almost touching her eyeballs on both sides. This time I want to cut close to the head. Is there any danger of bleeding too much, and how close shall I cut? [The bleeding usually attending amputation of the horns close to the head is immaterial. Amputate very close to the hairs; it may include a few of those all around.]

EPILEPSY.—There is a cow in my neighborhood which has fits—one about every three months. She has been fairly treated this winter, giving quite a flow of milk. Is her milk fit to use? Can the fits be cured? Would she be fit for beef? [Epilepsy may be caused by tumors in cranium, tapeworm cysts, and other influences, and treatment is most frequently unsuccessful. The existence of this ailment is not likely to affect the milk or the flesh, so far as the use or consumption of either is concerned.]

CANCEROUS GROWTH.—Allow me to consult your veterinary in regard to callous in pigs occurring after castration, as I have been troubled with it for the last year. In about three weeks after castration there appears a hard, small lump, and continues to grow. No amount of cutting or opening seems to have any effect. Tried cutting it out of one and the pig bled to death. Any information will be thankfully received. [The growth mentioned results from incompetency in the operation, or from his hands or instrument being unclean. You can prevent the matter by having a competent person operate who will disinfect his hands and instrument before using with a weak solution of carbolic acid.]

SHOULDER ABSCESS—RESULT OF A KICK.—I write to your veterinary department for a prescription for medicine to apply to a bruised shoulder on my 3-year-old mare. I think it was caused by striking against a tree while in the harness. It will need opening to let out the contents of the bunch, and what I want is something to apply after it is opened. 2. She has also a bunch on the shin-bone just below the hock joint, caused by being kicked several times in the same place, while in the stable, some three or four weeks ago. The skin is calloused to the extent of one-half inch thick and about four inches in length, and I am positive that there is a sack of blood or water between the bone and skin. I would like to know what to do with the bunch on the leg, as I have formerly had some experience in opening bruises on the shoulder, and using patent liniment to heal with, the nature of which I did not know. [1. When the abscess is opened and the contents allowed to escape, inject into the cavity twice daily the following mixture: Carbolic acid, 3 drachms; glycerine, 1 ounce; water, 1 pint. Keep the orifice open till it heals from the bottom. 2. Foment the parts three times daily with warm water till all heat and inflammation is reduced. Then clip off the hair from the part and rub in well for fifteen minutes an ointment composed of: Iodide of mercury, 2 drachms; lard,

2 ounces. Apply lard daily for a week to the part; wash off the ointment on the second day after application. Repeat, if necessary, in three weeks.]

On clay soils poultry yards may be greatly improved by placing a tile drain two feet below the surface of the yard, and then adding one foot of sand. Treated in this way, the rains carry down much of the filth to the drains, and save labor.

Quinine is not an *Antidote* for Malaria. It creates a diversion by producing a new impression on the nervous system. Shallenberger's Pills are an *Antidote*; they destroy the poison, and health returns immediately. No unpleasant effects; no sickness; no purging. Perfectly safe in any dose. Sold by Druggists.

One of the principal causes of heaves in horses is the feeding of dusty or dirty hay. Ordinary clean hay can always be fed with safety if properly cut up, moistened and mixed with ground grain, but to feed the dusty or dirty sorts is very injurious. Clover, owing to its liability to crumble, often gets dirty, even after storage, and should never be fed without being previously moistened.

Consumption Surely Cured.

TO THE EDITOR:—Please inform your readers that I have a positive remedy for the above named disease. By its timely use thousands of hopeless cases have been permanently cured. I shall be glad to send two bottles of my remedy FREE to any of your readers who have consumption if they will send me their Express and P. O. Address. Respectfully, T. A. Slocum, M. C., 181 Pearl St., New York.

If the horse's feet become dry and hard do not use oil or grease, but clean out the feet, soak them in salt water, putting one foot in at a time in a bucket, and then chafe briskly until thoroughly dry. After this at night fill the foot with fresh cow dung, well pressed in, letting it remain in overnight, and cleaning out next morning, and washing and chafing as before. Two or three applications of this simple remedy will generally effect a cure.

HUMPHREYS' HOMEOPATHIC VETERINARY SPECIFICS

For Horses, Cattle, Sheep, Dogs, Hogs, Poultry.
500 PAGE BOOK on Treatment of Animals and Chart Sent Free.

CURES—Fever, Congestion, Inflammation, A. A. Spinal Meningitis, Milk Fever, B. B. Strains, Lameness, Rheumatism, C. C. Distemper, Nasal Discharges, D. D. Boils or Grabs, Worms, E. E. Coughs, Hoarseness, Pneumonia, F. F. Colic or Gripes, Biliaryache, G. G. Miscarriage, Hemorrhages, H. H. Urinary and Kidney Diseases, J. J. Eruptive Diseases, Mange, K. K. Diseases of Digestion.

Stable Case, with Specifics, Manual, Witch Hazel Oil and Mediator, \$7.00
Price, Single Bottle (over 30 doses), .60

Sold by Druggists; or Sent Prepaid on Receipt of Price. Humphreys' Med. Co., 109 Fulton St., N. Y.

HUMPHREYS' HOMEOPATHIC SPECIFIC No. 28

In use 30 years. The only successful remedy for Nervous Debility, Vital Weakness, and Prostration, from over-work or other causes. \$1 per vial, or 5 vials and large vial powder, for \$5. Sold by Druggists, or sent prepaid on receipt of price.—Humphreys' Medicine Co., 109 Fulton St., N. Y.

CURED OF SICK HEADACHE.

W. D. Edwards, Palmyra, O., writes: "I have been a great sufferer from Constipation and Sick Headache, and have tried many medicines, but

Tutt's Pills

is the only one that gave me relief. I find that one pill acts better than three of any other kind, and does not weaken or gripe." Elegantly sugar coated. Dose small. Price, 25 cents.

SOLD EVERYWHERE.

Office, 44 Murray Street, New York.

Newton's Improved COW TIE
thousands in use.
Pushes them back when standing, draws them forward when lying down, and keeps them clean. Circular free, if you mention this paper. E. C. NEWTON, Batavia, Ill.

T. A. HUBBARD,

WELLINGTON, -:- KANSAS,

BREEDER OF— POLAND-CHINAS

—AND— LARGE ENGLISH BERKSHIRE HOGS

See list of boars used on herd:

POLAND-CHINAS—Challenge 4939, by Success 1999; Cleveland 6807, by Cora's Victor 553; Tom Corwin 12853, by Cleveland 6876; Glen Edge 11451, by Ohio King 3:09; Dandy 11139, by Cleveland 6807; Chip, by Tecumseh's Chip 10211. **BERKSHIRES**—Jumbo 12771, by British Champion 4495; Royal Duke 12923, by Sovereign 2d 1757; Stumpy Duke VI. 10492, by Duke of Monmouth 11861; Fancy Boy 15329, by Jumbo 2271; Champion 13975, by British Champion 4495; Joker, by Royal Peerless 17158.
My Poland sows are of the most fancy strains, such as Corwins, Black Bess, I. X. L., U. S., Gold Dust, Moorish Maid, Perfections, Gracefuls, etc. My Berkshires—British Champions, Sallies, Bell-Donnas, Robin Hoods, Duchess, Duke, etc. I have now on hand about twenty boars, weighing from 20 to 300 pounds, and a few gilt-edge, dandy fellows. Also about twenty-five young sows bred to Chip and Joker, the latter being the sweepstakes Berkshire boar at the late Kansas State Fair. The sows being out or my sweepstakes herd. My hogs are in fine condition. Pigs of all ages for sale.
FIRST-CLASS HOGS WITH INDIVIDUAL MERIT.

LANEY & PFAFF, GREEN RIDGE, MISSOURI.

THOROUGH-BRED

POLAND-CHINA HOGS

FOR SALE.

No poor pigs sent out. [Mention KANSAS FARMER.]

POLAND-CHINA PIGS!

135 FOR SALE.

Sired by six first-class boars, for season's trade. My herd is headed by STEM WINDER 7971.

Address F. M. LAIL, Marshall, Mo.
[Mention KANSAS FARMER.]

THE GOLDEN BELT HERD OF Thoroughbred Poland-Chinas

A few sows in pig to "Thorndale" (Vol. 9), at \$25 each. Also thirty-five fall pigs, of both sexes, at \$12 each, delivered free by express within 100 miles of Lyons on up to February 10, 1888. Stock shipped from here over either the A. T. & S. F. Mo. Pacific or St. Louis & San Francisco R. R. All breeders registered. Pedigree with each sale. Order at once.

F. W. TRUEDELL, Lyons, Kas.

OTTAWA HERD

OF POLAND-CHINA and DUREC-JERSEY Hogs. Twenty head of first-class boars from four to nine months old. Also seventy-five head of sows of same age, sired by Buco 4695, C. R. Lee's Gilt Edge 2887, C. R. Whipple's Stemwinder 4701, Daisy's Corwin 4697. Dams—Mazy 2d 6214, Zella 3d 8250, Maggie's Perfection 8210, Vone's Perfection 9424, Fay's Gold Drop 11676, Jay's Dimp 12172, Eureka Mayo 12176, and many other equally as well bred, and fine as can be produced by any one. Part of sows bred to gilt-edge boars of the most popular strains. Will sell at prices to suit the times. Never had any cholera in the herd. Write for prices.

I. L. WHIPPLE, Box 270, Ottawa, Kas.

FOUR BOARS. TWENTY SOWS.

IMPROVED

Poland-Chinas

W. S. HANNA,

OTTAWA, - - - KANSAS.

Have shipped to fourteen States, and twenty-six counties in Kansas, and headed nearly fifty herds of pure-breeds.

SEND FOR CIRCULAR. Describe exactly what you want.

Gold Dust Herd of Poland-Chinas.

J. M. McKEE, WELLINGTON, KANSAS.

My herd is composed of such strains as Black Bess, Olive or Take, Tom Corwin, Gold Dust and U. S. I sell nothing but first-class hogs of individual merit and gilt-edge pedigree. Choice pigs a specialty. Plymouth Rock Chickens of superior quality. Correspondence invited. Mention KANSAS FARMER.

Chester White, Berkshire and Poland-China Pigs, fine Setter Dogs, Scotch Collies, Fox Hounds and Beagles, Sheep and Poultry, bred and for sale by W. GIBSON & Co., West Chester, Chester Co., Pa.

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BLACK BESS

SELECT HERD OF LARGE BERKSHIRES!

G. W. BERRY, PROP'R, TOPEKA, KAS.

My breeders have been selected, regardless of expense, from the leading herds of the United States; are bred from the best stock ever imported, and represent seven different families. Healthy pigs from prize-winning stock for sale. Write for circular and prices or come and see. [Mention this paper.]

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[Mention KANSAS FARMER.]

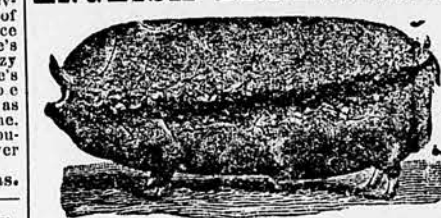
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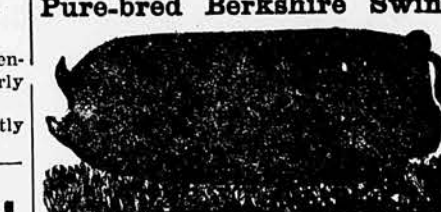


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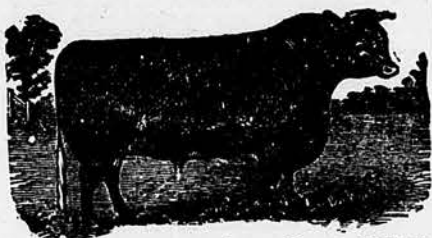
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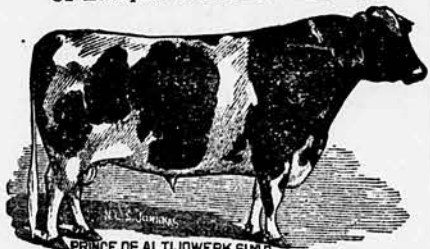
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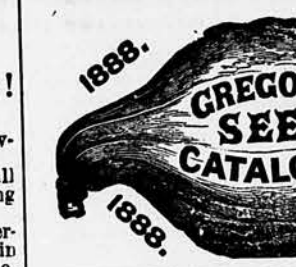
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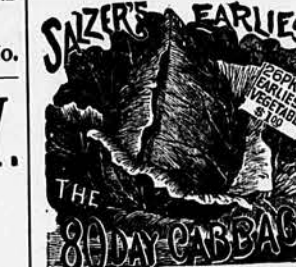
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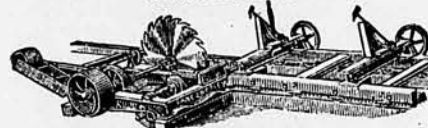
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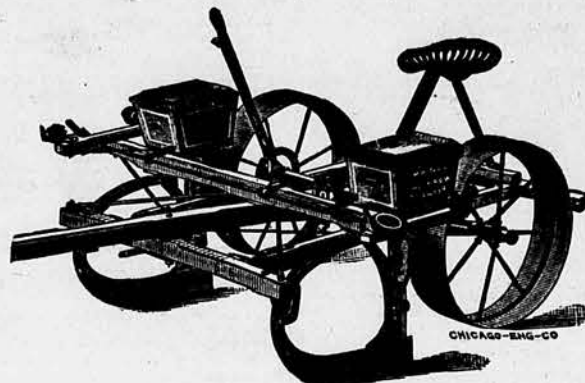
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BREEDERS' DIRECTORY.

(Continued from page 1.)

POULTRY.

SUNFLOWER POULTRY YARDS.—T. S. HAWLEY, Topeka, Kansas, breeder of PURE-BRED POULTRY. Leading varieties.

JOHN C. SNYDER, Constant, Cowley Co., Kansas, breeds PLYMOUTH ROCKS exclusively. Cockerels and pullets for sale at reasonable prices. Write for wants or send for circular, and mention this paper.

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"For Sale," "Wanted," "For Exchange," and small advertisements for short time, will be charged two cents per word for each insertion. Initials or a number counted as one word. Cash with the order.

Special.—All orders received for this column from subscribers, during 1887, will be accepted at one-half the above rates—cash with the order. It will pay you! Try it!

FOR SALE OR EXCHANGE.—Two fine young stallions. Address M. C. Hemenway, Hope, Kas.

WANTED.—A good Jack. Address Jesse W. Cook, Leoti, Wichita Co., Kas.

STRAYED.—A bay mare, 14½ hands high, star in forehead, branded 333 on hind quarter and 3 on cheek; has one white hind foot. Mare has been gone four months. Address C. Chivers, 415 Kansas Ave., Topeka.

FOR SALE OR TRADE.—For property or land a No. 1 millinery business in a first-class location in Topeka, a well-established trade of years, and fresh stock and fixtures. Reasons for selling, wish to return on account of health. Inquire at this office.

FOR RENT.—A small farm with conveniences for dairying. Also, similar place suitable for small fruit and gardening. J. U. Hughes, Rochester, Shawnee county, Kas.

WE HAVE CONCLUDED.—To turn our attention to the breeding of SMALL YORKSHIRES ONLY, consequently we are selling off all our Berkshires at about what they are worth for pork. We have a splendid lot of young sows and boars out of the very best families. Those wanting first-class Berkshires, now is the time. All eligible to record. Wm. Booth & Son, Winchester, Kas.

KANSAS ECONOMY INCUBATOR.—Capacity of 250 eggs, sold for only \$20. My new Book reduced to only 25 cents. It tells how to make and use the incubators, how to make a good brooder to mother the chicks and how to manage the chicks until ready for market; also, how to make hens lay all winter; also, how to cure Roup and Cholera. Langshan eggs sold for \$2.50 for 18. Address Jacob Yost, Topeka.

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WANTED.—A competent farmer, with small family, to manage farm near Topeka, on salary. Address, with references, "Exchange," care KANSAS FARMER, Topeka.

FOR SALE.—Light Brahma Chickens of the celebrated Felch strain. Call on or address Mrs. Emma Brosius, Topeka, Kas.

FOR SALE OR TRADE.—276 acres of land one-half mile from Richmond. For information, address J. Reed, Richmond, Kas.

200,000 RUSSIAN MULBERRY SEEDLINGS.—One-half to one foot, per 1,000, \$1.50; one to two feet, per 1,000, \$4; two to three feet, per 1,000, \$10. Also Catalpa, Ash and other forest trees, one or two years. B. P. Hanan & Co., Arlington, (on C., K. & N. R. R.), Reno Co., Kas.

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TWO-CENT COLUMN—(Continued.)

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