

# KANSAS FARMER

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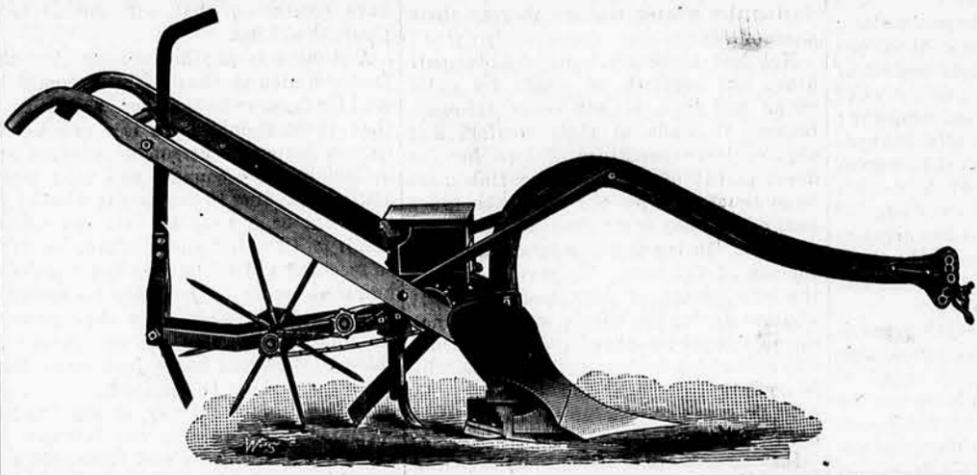
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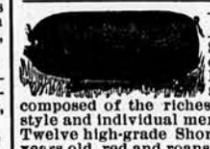
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**SHROPSHIRE SHEEP.**—You can buy high quality Shropshires of the highest breeding and Hereford cattle of Will T. Clark, Monroe City, Mo., located on H. & St. Joe and M., K. & T. R. R.

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**DR. S. C. ORR,** VETERINARY SURGEON AND DENTIST.—Graduate Ontario Veterinary College, Canada. Veterinary Editor KANSAS FARMER. All diseases of domestic animals treated. Rigging castration and cattle spaying done by best approved methods. Will attend calls to any distance. Office: Manhattan, Kas.

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Fancy-bred pigs at low prices. Write for catalogue and prices. Visit Connors, Wyandotte Co., Kas., for Holsteins and Poland-Chinas, and Hoge, Leavenworth Co., Kas., for Shropshires and Berkshires.  
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## The Stock Interest.

### THOROUGHbred STOCK SALES.

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

JUNE 1—Inter-State Short-horn Breeders' Association sale, Kansas City, Mo.

### SANITARY MANAGEMENT OF HOGS.

Dr. H. N. Paaren, United States Veterinary Inspector, in the *Prairie Farmer*, says that proper housing, healthy diet, and ordinary attention to sanitary management constitute the means whereby, in a great measure, the hog is enabled to resist disease. With the exception of accidental injuries, most of the prevailing ailments of our domestic animals are due to some fault in their management and keep. It is the unwholesome belief that anything is good enough for swine, that so much has degraded our pens and sheds, and frequently has extended its influence even to the houses of the owners. The result has, as we know, been severely returned to the owners in the shape of discomfort, disorder and loss.

None are prouder of their productions, their crops, and their stock than our farmers, it is true; but their neglect of sanitary matters is rapidly productive of evil and destructive of their property; whilst health is a subject daily demanding their attention, as they must to a great extent be physicians to the whole of their live stock. Although the knowledge of the great value of cleanliness has come to light at various times, it probably never was so much appreciated among our farmers as it is now.

We know that the air contains much putrid matter, or organic matter capable of putrefaction; but we cannot smell it always. The strongest smells are not the most dangerous, and the most dangerous may have no smell at all. The administration of fresh air is an old-fashioned virtue which will never cease to be right. If the same care and attention were bestowed upon the hogs that the farmer bestows on his other live stock, we should hear of less losses from disease. Wet and filth never were conducive to health in any living being, why should it then be so to the hog? The hog of to-day is not the hog of fifty or a hundred years ago, and he has not the strong constitution of his far-off progenitors; for the improvements made in the various breeds of hogs have resulted in materially encroaching on their vital energies and strength. Therefore, the evil resulting from careless management are the more apparent.

One great fault in the management is to keep too many hogs together in one shed or enclosure. From want of proper protection in the way of housing, hogs are very apt to crowd together in bunches during cold weather, and coming into the sheds wet and dirty, and being obliged to lie either on old and filthy straw bedding, or on a wet and damp floor, their sweating and steaming soon produces a foul atmosphere, and the bedding not being removed at proper intervals, gets rotten and adds to the contamination of the air.

Being thus packed together in the building, the hogs in a warm and perspiring condition, are next exposed to the influence of cold wind and wet by being turned out in the morning hours to run in the field among grass wet with cold dew or from rain or hoar frost, or to be fed from troughs in the yard. Among the common consequences are congestion, cold or catarrh, and if the so-called hog cholera happens to be prevailing, they are almost certain of becoming affected with that disease, as their system under such management is rendered predisposed or susceptible thereto.

In many places the hogs are kept in miserable sheds, no provision being made for proper drainage, the ground sloping towards the sheds, which, frequently being unpaved or without proper flooring, are constantly damp and wet with pools of urine and filth abounding, and with wind and sleet approaching from all quarters. In proportion as the standard of breeding has become higher, so has the vital force, energy and hardness become lessened; and the effects of improper quantity and quality of food, filthy and stagnant water, faulty construction of house, and undue exposure to atmospheric influences have become proportionately more baneful.

A proper arrangement of the pig-sty is of equal necessity for the successful breeding and fattening of swine as it is for the

other species of domestic animals. But this adjunct to successful breeding and management is too frequently overlooked because of a prevailing but mistaken idea that swine are not partial to cleanliness, and therefore are less in need of it than other animals, and that they are hardier than these and therefore less sensitive to the changes of temperature, etc., consequent upon improper housing.

Even if we allow that the peculiar thickness of its hide makes the swine less sensitive to cold, it must be conceded that a certain uniformity of temperature is always necessary for its bodily thriving, increase and growth, and especially so where the hide has become thinner and the hairs less abundant as a consequence of a higher standard of breeding. For this reason an even temperature during the winter months is a necessity, and especially for young and growing animals. The young pigs which, at the time of birth, are almost devoid of hair are very susceptible to the influence of cold, and not infrequently do they perish from want of sufficient warmth. In cold sties it is therefore often difficult, if not impossible, during the winter months to rear them successfully.

Not less necessary is an even temperature and warmth of stable for older swine and such as are being fattened, because it tends to their comfort and requires less expenditure of food for the development of bodily heat, which must be so much greater the more the inner heat of the body is required to resist the effects of the lowered temperature of the surface of the body. To provide against the evil effects of cold and inclement weather during the winter months, is not the only requirements of proper housing. Too great heat during the summer months is equally injurious, and especially to animals that are undergoing the process of fattening.

Instead of keeping swine indoors during the nights of summer, it is preferable to provide open sheds for them outdoors, for which an ample extension of the roof of the sty will suffice. The emanation from the bodies of the animals crowded together in a hot sty during summer nights is very apt to engender miasma, which may be productive of typhoid disease, swine plague, or similar diseases.

Thick stone or brick walls are preferable to wooden, because the temperature within these is less affected by the outer temperature. The exhalation from the bodies of the animals, and the evaporation of moisture, etc., from the floor, render proper ventilation a necessity. This is best effected by air tubes leading through the ceiling and roof, and by adjustable ventilators, properly arranged in the lower part of the walls.

The sty should be so constructed as to facilitate cleanliness. The great amount of sloppy food consumed by the hog causes considerable fluid evacuations, which, to insure cleanliness, comfort and health, requires the daily removal of solids and proper sewerage to carry off fluid excrements. A dry floor is as necessary for the health of the animals as proper ventilation, especially for young pigs, which often sicken and die from being kept in wet and cold sties. Want of attention to cleanliness and ventilation is also a source of lousiness and various skin diseases.

### Sound Advice to Horse-Raisers.

EDITOR KANSAS FARMER:—I have been waiting for some more able writer than myself to indorse Dr. Orr's article entitled, "Plain Talk on Breeding," in your paper of March 30, for the Doctor has certainly given advice that it would be well for us farmers and breeders to heed, if we would make horse-raising a success.

Every one who has been a close observer will admit that there are far too many mares with curbs, curby hocks, spavins, ring-bones, thoroughpins and vicious habits, which, when their owners find they are fit for nothing else, put them to breeding, when the facts really are that they could be put at nothing that would lose their owners as much money. And right here let me say that I have found no breed of horses that are altogether exempt from these defects. We see it in the different breeds of draft horses, in the trotting and running horse, and there is scarcely a week passes but that we see that some of the trotters have to be laid on the shelf from some of these defects. The mares are put to breeding and the

stallions put in the stud! And, as the Doctor says, these breeders will always have a story to tell of the cause—generally some accident. Sometimes the mare stepped on it when a colt, which caused the defect. (A pity she did not step on a vital part and stamp the unsound creature out of existence.)

Now, let every sensible reader answer for himself, "What can we expect from such breeding?" Is it not a fact that if this continues, in a few generations our horses will have degenerated so that we will have far too many crippled and unsalable horses which the owner does not want, nor any one else?

I would like to give a little advice, especially to the new beginners. Whatever breed you prefer, experience has taught me that the strong, medium size, healthy and strictly sound animals, both in sire and dam, should be the ones selected for the foundation of your herd, for "like will beget like." We seldom see good results from overgrown sire or dam of any breed. I would say, brother farmers, let our motto be, style, soundness and quality, and not numbers, and then we will always have something that will sell or be a pleasure to keep.

And there is another matter that the Doctor hinted at that I think would be well for farmers to consider, and that is that there should be a law enacted to have a competent person or persons appointed in every county, and that every stallion standing in the county should be inspected each year by said committee, and if found sound and worthy, let it be so recorded and announced in his posters; and if unsound, let that also be recorded and the defect named, so that persons wishing to breed who are not judges in these matters may know just what they are doing and not be deceived.

And again I would say to my brother farmers, let us awake to our interests in these matters, and try and raise good and sound horses, for for such there is always a good demand.  
JNO. WARNER.  
Eureka Stock Farm, Manhattan, Kas.

### Live Stock Husbandry.

Remember that even a hog can not be injured by cleanliness.

Now is a most favorable time to secure good, rapid growth of the pigs.

For sheep, a little copperas mixed with the salt is considered of great value.

Among the many advantages with sheep is their disposition to remain wherever they are placed.

As soon as the lambs will eat, ground oats, mixed with bran, is one of the very best foods that can be given.

Sheep may be readily marked by taking a small pinch of Venetian red in the fingers and pulling through the wool.

The value of the brood sow is more largely determined by the number and quality of the pigs she raises than by her pedigree.

The man who takes care in using good bulls and guards against inbreeding will soon have a class of stock on his hands that will bring the top on the market.

The April receipts of cattle at the Kansas City stock yards, says the *Drovers' Telegram*, will probably run from 78,000 to 80,000, which will be 17,000 or 19,000 greater than last April, 38,000 or 40,000 less than in April, 1890, and 6,000 or 8,000 larger than any April previous to 1890.

Let us stop resolving about the cattle industry and turn our attention to helping ourselves in any way that seems practical, considering our environments, so that the supply is curtailed and the remainder improved by not raising any more scrub stuff, as life is too short for that. Do not confine your attention to one single class of stock. Diversify stock growing. Remember that there is money in mules and mutton even though the production of beef and pork don't promise well. Be ready for any emergency by practicing diversified live stock husbandry.

The Statistician for the Department of Agriculture, J. R. Dodge, says that the condition of cattle in the United States as regards health is generally equal to that of preceding years or even superior to it, as nothing of an epidemic character is anywhere prevalent. The few cases of serious character have been effectually dealt with or are under control, and except those ailments ordinarily coincident with poor treatment as to food and shelter, the health average is uniformly high and

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(Tasteless—Effectual.)  
FOR ALL  
**BILIOUS and NERVOUS DISORDERS.**

Such as Sick Headache, Wind and Pain in the Stomach, Giddiness, Fullness, Swelling after Meals, Dizziness, Drowsiness, Chills, Flushings of Heat, Loss of Appetite, Shortness of Breath, Costiveness, Scurvy, Blisters on the Skin, Disturbed Sleep, Frightful Dreams, All Nervous and Trembling Sensations, and Irregularities Incidental to Ladies.

Covered with a Tasteless and Soluble Coating.  
Of all druggists. Price 25 cents a Box.  
New York Depot, 365 Canal St.

especially so where cattle-raising is important. The condition of swine, according to the same authority, is better than at the same date a year ago, the general average standing at 95.2, against 91.3 last April. The hog-raising States from which commercial supplies are drawn are especially free from disease. The percentage of loss during the year was but 5.04, and the aggregate number dying from disease 2,850,596. Last year the percentage was 8.4, and the total loss 4,237,404.

The *American Sheep-Breeder* says: "Lime and sulphur are the greatest enemies the American wool-grower has to fight. If you want to help keep the standard of American wool below that of other wool-producing countries, use lime and sulphur. May the day soon come when our wool-growers will discard it. As an enemy, it has wrought far more damage than the wolf or coyote." The *KANSAS FARMER* desires to be placed on record as taking issue with the *Sheep-Breeder* in one respect—dogs are the greatest enemy of sheep husbandry in the United States.

### Good Sense!

Disease is largely the result of impure blood. To purify the blood, is to cure the disease! As a blood-purifier and vitalizer, Dr. Pierce's Golden Medical Discovery stands head and shoulders above any other known specific! Its power in this direction is nothing short of wonderful. Guaranteed to benefit or cure in every case, or money refunded.

The fact is stated in the *Cleveland Iron Trade Review* that the average vessel of the great lakes is twice the size of the average vessel of the seaboard, and that the great lakes built in 1890 40 per cent. more steam tonnage than was built on the entire seaboard. The need of a ship waterway from the lakes to the ocean cannot be a matter of question.

### Make a Note of It!

Read it over and over again, spell it out and sing it, until it is indelibly fixed in your mind, that Dr. Sage's Catarrh Remedy is an infallible cure for chronic catarrh of the head, with all its distressing complications. Impaired taste and smell, offensive breath, ringing noises in the head, defective hearing, nose and throat ailments, are not only relieved, but positively and permanently cured! This is no fancy of the imagination, but a hard, solid fact, proven over and over again, and vouched for, under a forfeiture of \$500, by its manufacturers, the World's Dispensary Medical Association, Buffalo, N. Y. "A word to the wise is sufficient."

### FINE STOCK PRINTING.

The *KANSAS FARMER COMPANY* have now completed arrangements which will enable breeders and owners of stallions for service to secure their stock printing at this office. Anything in the way of posters, catalogues, books, blanks, etc., suitable for breeders, can be supplied from this office. Very few printing establishments have a supply of modern cuts of any breed suitable for getting out work that is representative for improved stock, and it is this class of modern stock printing that we are prepared to supply. Write us for any blanks, herd registers, service books, or anything in the printing line needed by breeders or stallion owners, and we will fill all orders, guarantee first-class work and reasonable prices.

Any of our newspaper exchanges who do job printing, and who cannot afford to carry a full line of modern stock cuts, and desire us to get out a first-class job for any of their customers, can do so through this office. Write us for particulars.

Is your blood poor? Take BEECHAM'S PILLS.

## Agricultural Matters.

### THE MOST CORN FOR THE LEAST LABOR.

The *Practical Farmer* offered a prize for the best paper on corn. The award was made for the following, which, while written by an Ohio farmer, contains good points for Kansas corn-raisers:

"The problem to study, is how to get the best yield for a given amount of labor. Every farmer understands the main conditions needed to produce a good crop, and the first of these is a rich soil. If planted on poor land without manure or fertilizer, no amount of work on it will produce a large crop. Corn always responds with a generous yield, if its few and simple demands are complied with in proper time and season. Many farmers, however, neglect or forget to meet these demands and nearly always suffer the penalty in the fall, by getting only a part instead of a full measure of yield for their labor. No soil is too rich or strong for corn. Oats, wheat, rye and many other crops may lodge and go to waste on land that is too rich for them, but corn will use only what it needs of the elements in the land, no matter how generously they may be supplied. Among the first requisites is land well prepared and made mellow, and good seed to plant.

"Avoid planting too early. It is best to wait till the ground is warm enough to germinate the seed. To prepare the land—if clay loam—two or three kinds of harrows are needed, besides a roller or lump-smasher. If one has only a common harrow, he can easily supply a smoothing harrow that will do good work to pulverize the land, by buying a keg of No. 40 or No. 80 wire spikes, and driving seventy-five or a hundred of them at an angle of about 35° to 45° through two or three narrow, two or two and a half inch plank, bolted together in the form of the capital letter A. I call it the poor man's smoothing harrow, and find it equal and even better than many high-priced tools of that kind in the market.

"A keg of spikes costs from \$1.80 to \$2.25 and will make teeth enough for three or four harrows. The smoothing harrow is especially needed as a labor-saver, both before and after planting. The top of the hills or drills should not be higher than the common level of the ground. An inch below the common level is still more convenient for killing all weeds that sprout and come up with or before the corn. The weed-killing is done by wholesale and in little time with the smoothing harrow four or five days after the corn is planted. The crust on the soil is also broken and fined by this short job, that should not be neglected if the ground is weedy. When the corn is up fairly, the field should again be gone over with weeder or smoothing-harrow, always keeping team or horse from stepping on the hills. If planted in hills, three feet eight inches apart in the rows, and rowed both ways, and a good stand is secured of four plants to the hill, the battle with weeds is more than half won by the second scratching of the surface with weeder or smoothing-harrow. After this it only needs the cultivator two or three times till the corn is knee-high, to obtain a good yield in a favorable season. If the season is dry and rain is needed when the ears are just forming, a little cultivation will oftentimes add one-fourth more bushels at harvest. It should be borne in mind that the cultivator should not run too deep, as the lateral roots of the corn may be broken thereby and the crop injured. Much has been written as to which is the best method of applying manure, either in the hill or broadcast. I have observed, during the past twenty-five years, that on the whole, broadcast and harrowed in well is the best. In

proof of this, it is only necessary to examine the corn roots and see how far they reach out from the hill about the time the ears are forming. It is then that the roots reach out and feed ravenously on all the elements. On the unworn and comparatively new lands of Nebraska and Kansas, and also on the rich river bottoms of the older States, any one can raise corn by simply watching and doing as he sees his best and most thrifty neighbors are doing. With two-horse check-row planters and two-horse wheel cultivators on soil naturally rich and especially adapted for corn, a good crop is raised without much study. In the Middle and Eastern States, however, both questions, fertility of soil and good judgment as to time and method of work, are important factors. Good seed also should always be secured. It is always easier and better to thin out a little than to plant the second time.

"The work of weed-killing and cultivating the crop is not difficult if begun as stated above and continued at proper intervals. The weeds are easily killed if killed young, and the cultivating is light work if done at proper intervals, say a week apart, till the corn is knee-high. In the East the fodder, if properly cared for, is quite a valuable part of the crop, especially in the dairy districts. It takes but a little more time and care in cutting and shocking and in binding the stalks and stacking or shocking them properly than it does to do the work in a careless and slovenly manner. This part of the season's work with a corn crop is well worthy of attention. It belongs properly, however, to the saving of the crop instead of raising it. The above is written for the purpose of securing the most corn for a given amount of work. It is written to invite attention to the demands that corn makes before it will give a good return for the labor expended upon it. On land of fair strength and fertility I have found that a large tablespoonful of phosphate to the hill brings as large corn as a forkful of manure. If time, then, is worth \$1 per day, it will be seen that \$2 or \$3 worth of phosphate will go as far as \$2 or \$3 in work in manuring the hill. I, therefore, consider it economy to use the phosphate mostly in the spring and save the manure to apply on wheat ground in fall.

"No picture of farm life is more gloomy than to see a man and one or two boys in the late fall wading among weeds, hunting and husking nubbins of corn; and no picture is more cheerful and happy than the bright and merry faces and swift motions of the huskers in a clean field full of mammoth shocks, rapidly filling their baskets and wagon with the great golden ears.

"Only a little watchful care and judgment, a little extra work at the right time, makes the change from discouragement to satisfaction and pride."

### Asphalt Wood-Pulp Roofing.

A number of years of experiment and practical trial has proven that a Wood-pulp Roofing, saturated with Asphalt, is undoubtedly the best roofing on the market. It contains absolutely no coal tar, and is thoroughly water-proof, and fire-proof, as lighted sparks or brands of fire falling on it will not ignite it. As it is nailed with a tin cap every two inches apart, a wind that will blow this felt off will certainly take the building from its foundation. This roofing has been in use twelve to fifteen years, and has withstood the severest changes of weather in all climates. No experience is necessary to put it on, and by following the directions a much cheaper, better and more durable roofing can be made than tin, iron or shingles. It is adapted for flat or steep surfaces. As no coal tar or coal tar residuum enter into the manufacture of this roofing, it never shrinks, sloughs, or pulls loose, and different from all other roofing (except slate and shingles), it is self-contained, or in other words, presents all the elements of a finished roof before being applied, and can therefore lay uncoated for weeks without injury. This

roofing is manufactured and sold by the W. E. Campe Roofing and Manufacturing Company, Kansas City, Mo., who shall be pleased to give any further information desired, on application.

### Utilize Vacant Places.

"On every farm of forty acres or more," says C. W. Murtfeldt, in *St. Louis Republic*, "there are places or spaces which, if utilized, would often make handsome returns for the outlay in their improvements. To illustrate: In Orange and Dutchess counties, New York, there are miles and miles of stone-wall fences. Every time the land is plowed there are, seemingly, as many or more stones as there were in previous years. They have to be removed, and, consequently, they take up less room when made into a wall four or five feet high. They seem to be a great drawback on the land. On large farms, to facilitate driving cattle from field to field, real lanes are made for this purpose. Perhaps this would be a waste of land? But these farmers have proved that on the north side of these stone walls fruit trees will grow, especially cherries, sweet and tart. These not only beautify the place, but when there is a full crop bring in lots of money, with the great markets of New York city only a few hours away. The tug-boats on the Hudson deliver berries and cherries in New York in superb condition, and all find a ready sale; more could be sold every year.

"If, now, our readers would look around they might find many places on their farms where tart cherries and fine plums would grow in abundance, which at the present time make no returns at all. Plums thrive particularly well around henhouses and poultry yards. All kinds of poultry are death to the curculio, or 'little turk.' Place your coops with the old hen and chicks right under the plum trees and every curculio that drops down is sure to be gobbled up.

"Trees planted around your cattle yards, where the cattle cannot break them down, would thrive amazingly and be very profitable if peach, plum or cherry. These like the half shade afforded by the fencing. It keeps them from sun-scald and thus from the borers, which always attack those spots on the trees.

"But not only for utility, but also for beautifying, may those vacant places be improved. There are very many varieties of hardy flowering shrubs which can be had at a small price, and which could be planted here and there and make the place look cozy and inviting.

"American farmers are such utilitarians that every such investment is immediately met with the question, 'Will it pay?' Without hesitancy we answer, certainly, and if challenged for the proof we claim that the eye of man, even of the uneducated, loves all forms of beauty. True it is that some men do not see the beauty of a landscape or of the sky, but such very quickly notice the outline of a beautiful horse or dog, or Short-horn, even aside from their intrinsic or money value.

"A new man comes into a certain neighborhood, and being on the lookout for a home, he sees a cozy little cottage, with here and there a small shrub of althea or a climbing rose, or an evergreen or two; he buys the place because it pleases his fancy. He might have had a larger place of just as fertile land, but the small one was preferred; the vacant places had all been utilized and made productive, either in cash value or in beauty of appointments.

"Take another view. A gentleman buys a tumble-down house and a lot most neglected. His eye takes notice of what can be made out of it, with a little taste and 'gumption.' Of course, he gets it cheap, because of its condition. Mechanics are employed and a little extra cash is invested, and presto, there is a porch to the house, there is a new

fence in front and rear, all is painted and straightened out. Thus \$200 or \$300 have been expended. Another man comes along and offers, besides the cost of improvements, \$1,000 more than it cost. Whether accepted or refused its value has been raised to that amount. Yes it pays in more ways than one."

### Masked Venom.

Does anybody imagine that he or she can breathe air impregnated with malaria for any length of time and yet go scatheless? If any such there be let them incur the risk and then doubt. The poison in disguise as surely enters the system as a dose of prussic acid swallowed with suicidal intent. Hostetter's Stomach Bitters is the sole reliable defense against the malarial virus. Rheumatism, dyspepsia and constipation are remedied by it.

Nature has decreed that, in some parts of the country at least, it should be cold in winter; but she has generously provided for those who seek a milder climate. To the winter resorts of Texas, viz.: Austin, Houston, San Antonio, Rockport, Corpus Christi, Galveston, Lampasas and El Paso, and Deming, N. M., the Missouri, Kansas & Texas railway will, until April 30, sell at very low rates round-trip excursion tickets having a transit limit of thirty days in that direction, with a final limit to return until June 1, 1892, being good to stop off at all stations in the State of Texas within the transit limit of the ticket. This road will also sell at greatly reduced rates round-trip excursion tickets to California and Mexican points, limited to six months from date of sale, granting stop-overs both going and returning. For further information, call on or address

GEO. A. McNUTT, T. P. A.,  
619 Main St., Kansas City, Mo.  
W. G. GRAHAM, Acting G. P. & T. A.,  
Parsons, Kas.  
E. B. PARKER, Ass't G. P. A.,  
509 Chestnut St., St. Louis, Mo.

### For the Great Bridge Celebration at Memphis.

The Kansas City, Fort Scott & Memphis Railroad Company will sell round-trip tickets from all stations on its line at very low rates. The great bridge will be dedicated on May 12. Tickets will be sold on May 10, 11 and 12, good to return until and including the 15th. Rate from Kansas City to Memphis and return will be \$10. This celebration will be one of the greatest events that has taken place in the South since the war. It will be participated in by Governors of States, members of the Cabinet, prominent members of the Senate and House of Representatives, prominent army and navy officers and probably by the President and Secretary Blaine, the latter, however, not yet positive. In addition to innumerable parades and grand attractions, there will be a grand naval display by torpedo boats, gunboats and war ships. The war ship Concord is already on her way to Memphis from Matanzas. Special train arrangements and full details as to the great celebration will be announced later.

J. E. LOCKWOOD,  
Gen'l Pass. and Ticket Agent.

### Through Car Service to the Pacific Coast via the Chicago, St. Paul & Kansas City Railway.

The Chicago, St. Paul & Kansas City railway has recently inaugurated a line of first-class Pullman tourist sleeping cars to the Pacific coast, to leave Minneapolis and St. Paul, Dodge Center, New Hampton, Sumner, Oelwein, Waterloo, Marshalltown, Des Moines and all main line stations on their daylight train, No. 4, Thursday of each week, and to make through connections to San Francisco and Los Angeles, Cal., and passengers to intermediate destinations can also have the privilege of this service.

This is an accommodation which the people of the great States traversed by this line, namely—Minnesota, Iowa, Illinois, Missouri and Kansas—should appreciate, and it, no doubt, will result in largely increasing the Pacific coast travel of this enterprising line.

Returning, these cars will leave Los Angeles every Thursday and San Francisco every Friday, leaving Kansas City the following Tuesday evening, and arriving at Minneapolis Wednesday of each week.

The agents of the Chicago, St. Paul & Kansas City Railway will take pleasure in giving any information regarding this car service and reservations can be obtained upon application to them. Passengers from Dubuque and intermediate stations to Oelwein and from all Illinois stations will have the advantage of this tourist car from Oelwein.

## Affiance Department.

### Capital vs. Labor.

EDITOR KANSAS FARMER:—W. H. Cowles, of Topeka, in your issue of April 6, in well-chosen and flowery language, undertakes to defend and justify the blighting contraction policy of the Republican party. He seeks to persuade your readers that it would be dangerous to disturb the present financial system, and as a silencer to those who differ from him on that point, he says that a contracting standard is better than a fluctuating one. He admits that there is not more than one-tenth enough money in circulation with which to do the business of the country. The remainder of the business must be done on credit. Credit means interest, and interest is the greatest blighting curse of this country to-day. Ninety per cent. of the purchases are on credit. And why? Because of the great scarcity of money. The blighting influence of contraction does not stop here. It destroys enterprise and business, leaving the dire necessity of sustaining life as the only incentive to effort and industry amongst the laboring classes.

Again he says: "There is nothing to be gained by a change in the value of a dollar, except with reference to debts already contracted." If the financial policy of the government was so changed that the price of the products of labor was doubled, would it not be much easier for us to pay our taxes, which are used to pay officers' salaries, which are fixed by law? Could we not oftener ride on the railroad, whose rates are fixed by law? Would it not be easier to pay the Doctor, whose fees are fixed by law? Would it not be easier to pay the miller's toll, which is fixed by law? And a hundred other things, such as Recorders' fees, Coroners' fees, Probate Judges' fees, rates of interest, etc., all fixed by law, besides being a wonderful stimulus to business and enterprise. Again he says: "A change in price does not prove that there has been a change in the volume of money." It is true that there are other causes which at times affect the price of a single article of commerce; but when the prices of a large part of the articles of commerce are affected it is an infallible proof of a change in the volume of money.

His "jack-straw" illustration to prove the worthlessness of greenbacks is too absurd to receive even a passing notice. I suppose Mr. Cowles is not aware that a greenback dollar will buy just as many pounds of sugar as a gold dollar. And again, if Mr. Cowles was living during the late civil war, he will remember that his precious idol, "the gold dollar," hid itself away for about seventeen years, at a time when this government needed money the most it ever did in its history, and that the greenback came to the rescue and supplied the necessary funds.

He says "that the primary function of money is for a medium of exchange." Yet he admits that the only power vested with the right to furnish us with money supplies us only one-tenth enough. Now let me illustrate this point: Suppose that in order to be economical, the farmer only feeds one-tenth the amount necessary to keep his stock in thrifty, growing condition; would they not soon become somewhat like Pharaoh's lean kine, or the inmates of Andersonville prison; or, to make the practical application, like American farmers of to-day? Is food necessary to sustain animal existence? If so, why limit it to one-tenth the amount actually necessary, and thereby stunt the growth, if not actually endanger the lives of your animals? Then the simple question for Mr. Cowles to answer is this: "Is money necessary in order to carry on the business of this country?" If so, why limit it to one-tenth the amount actually necessary, and thereby cripple and dwarf every department of labor—labor the only source of wealth? American laborers, be not deceived. You live at a critical period, not only of this country, but in the world's history. There is a war now in progress more dangerous than the late civil war. It is a war between capital and labor. If capital wins, the republic goes down, as other brilliant nations have gone down in ages past; but if labor wins, the republic will still live, brilliant on the pages of history, a boon to coming generations, a blessing to the world. Mr. Cowles is on

the side of capital. I am on the side of labor. F. M. WIERMAN. Wilsey, Kas.

### Ranson on Wool Tariff.

EDITOR KANSAS FARMER:—Let me kindly urge upon Bro. Harter not to get excited on this free wool question. He seems very liable to do some over-shooting. It is a great big question, and we ought to be honest with each other in discussing it. He need not bother himself about my "conscience," nor as to my "demanding a duty on woolsens," or my advocating the destruction of ewes after five years old, or of my "discouraging the handling of large flocks." Nor need he draw on his fertile brain to get at the conclusion that I "would consider nothing special legislation that favors the rich man." I have taken no position to warrant such deductions, and when he delivers himself as he has, he simply shells the hill beyond.

In my township are one hundred and sixty farmers. Employed by them are some seventy-five farm hands, and our assessor told me yesterday that there were no sheep in the township but mine.

Now what can we say of a law that will raise the price of clothing for the two hundred and thirty-four for the express purpose of giving me, the two hundred and thirty-fifth man, a better price for my wool? Are such laws a government of the people, for the people and by the people? or is it special legislation? Is it a "fair for all" deal, or is it a discrimination in favor of the minority and against the majority? Don't dodge this question, Bro. Harter. Don't say my township is no criterion. When we take in our cities and towns, I dare say the *pro rata* of wool-growers will not exceed that above indicated throughout the State of Kansas.

"How about the manufacturer?" he asks. I answer, he's simply a lord to the manor born. The government is his, and his operatives furnish the sinews. Worth his millions, he pays tariff on the clothing he wears. His one thousand operatives, worth not to exceed \$100 per head, pay one thousand times the tariff he pays. This is one of the benefits and blessed provisions of the McKinley bill. A government of the people, by the people and for the people, don't you see? Yes, the American manufacturer ought to be able to squeeze out a living. Bro. Harter will furnish him four pounds of good washed wool for \$1.50. He spins it, weaves it, makes it up into an overcoat, and sells it back to Bro. Harter for \$15. Thus he gets \$13.50 for the work, lining, thread, commission for selling the coat, the shoddy he mixes in and the buttons. Now, since his operatives work very cheap and furnish in the way of tariff paid nine hundred and ninety-nine thousandths of the sinews of government, I think the American manufacturer, if attentive to business, will get along.

But, Bro. Harter, why fight for a tariff on wool? Don't you see the higher the tariff the less we get for our wool? As the tariff has been advanced, wool has gone the other way. Since the adoption of the McKinley bill, wool has declined 2½ cents per pound, or about 18 per cent.

WM. H. RANSON.

### The Presbyterian General Assembly--At Portland, May, 1892.

For the accommodation of those desiring to visit at points in the vicinity of, or at Portland, during May, the Union Pacific will sell tickets at one fare for the round trip. Tickets on sale May 9 to 14 inclusive, limited to ninety days from date of sale.

For tickets or additional information apply to A. M. Fuller, Agent Union Pacific system, 525 Kansas Ave., Topeka.

According to some experiments reported recently in testing washed and unwashed butter for fresh quality and for keeping, it was determined by a jury of merchants, first by the decision of twelve to eight, that the unwashed was the better of the two, but after three weeks had expired the same samples were handed round, and when only three out of eighteen preferred the unwashed sample. This would go to prove that washing takes the early and most volatile flavor out, but as it also takes the buttermilk out, the butter keeps better for it.

Well Machinery Send for illus. cat'lg. Pech Mfg. Co., 60 4th St., Sioux City, Iowa.

## The Apiary.

Edited by Rev. E. T. Abbott, St. Joseph, Mo., to whom all communications relating to this department should be addressed. Inclose a stamp if you desire a reply by letter. We invite questions and communications from any of the readers of the KANSAS FARMER who may be interested in bee culture.

### Some Seasonable Hints.

The weather of the last two weeks has been very hard on bees, and many colonies will be lost entirely or so much reduced that they will be of no profit to their owner unless they receive some attention at once. Strong colonies have been breeding very rapidly for some time, and for this reason have consumed a large amount of stores. Those that were not well stocked with honey in the fall are now, no doubt, short of food, for the weather has been so unfavorable that they have not been able to gather much honey, even in localities where there is plenty of bloom. If these colonies are not fed at once, they will soon begin to dwindle, if they do not all die from starvation.

Let every reader of the KANSAS FARMER look after his bees—if he is so fortunate as to have any—as it is surely wicked to let bees starve when a very little attention would save their lives. Then they will repay the owner well for all his trouble, if they are given proper attention at once.

Examine every colony and see that they have plenty of honey. If not, make a thin sirup out of any kind of good sugar, granulated is the best, and feed it to them warm in the evening in the hive.

It is best to wait until the bees stop flying. As good a feeder as you can get is an oval wooden butter dish. Place it in any part of the hive where the bees can get at it and fill it with warm sirup, as suggested above. In the morning the bees will have the sirup all in the combs near the brood.

Feed every night until the bees have plenty, or until they are gathering honey quite freely from the fields.

As I said before, you will be well repaid for all of your trouble and have the consciousness that you have not needlessly permitted the bees to starve.

Bees do not need much attention, but they need it at the right time.

### Honey.

We have often said in these columns that every farmer should keep enough bees to gather a liberal supply of honey for the family's use. Why is it they do not do so? We cannot answer this question. Many people have no "luck" with bees. Those failing to succeed discourage others and so it goes that nine-tenths of the farmers do not keep bees, and a half of those that do keep them never get anything from them. On the other hand a few people who "get the hang of bee-keeping" make from \$5 to \$15 per stand out of them by producing honey for market. As a matter of fact a dozen stands of bees do not require as much care as twenty-five chickens, and in an ordinary season, if well handled, will gather 1,000 pounds of surplus honey. This is an amount of honey that most farmers would not dare dream of ever owning, yet it is easily within the reach of any intelligent, careful farmer.

Of course honey cannot be gathered without bees, and bees will not live from year to year and collect large stores, making it accessible to their owner without good care and appliances. But good care of bees is entirely simple, just as easy as growing corn or onions when once learned. There is never but one thing to do at a time. There is a convenient time and an easy way to do that thing. No man can sit down on a stump and think out the details of bee-keeping for himself. Such a thing is no more practical than to go into a smith's shop and without experience attempt to forge and shape a horse shoe. But with a practical book on bee-keeping to teach him what to observe of the habits of the bees and what are the conditions under which colonies of bees preserve their thrift; and with one or two colonies to observe and to train himself in handling, any farmer or farm boy of fifteen in two years' time can become an experienced and competent bee-man. This knowledge can be gained without interfering in any way with other farm work and at no great cost. The original outlay for book, colony and supplies for the two years need not exceed \$15. The knowledge gained by the experiment, for its own sake, is worth ten times the investment. The profit made with the bees will probably be 300 per cent. on the investment, and though failure may result the object is worth an earnest effort on every farm.—Stockman and Cultivator.

### IS CATARRH CURABLE?

A Serious Question to Many People Answered.

The difficulty with which catarrh is cured has led to the invention of a host of remedies which produce temporary relief only. The unthinking masses expect to find some remedy which will cure them in a few days, and to take advantage of this false hope many compounds, which have instant, but transient effect, have been devised. The people try these catarrh cures one after another, but disappointment is the invariable result, until very many sincerely believe that no cure is possible.

In the majority of cases (especially those of less than two years' duration) catarrh can be cured in a few weeks by the proper use of Pe-ru-na. Some cases are cured by six bottles, others by four, and we have not a few testimonials who have professed a cure from even one bottle of this remedy. When a case of catarrh has existed for five or ten years a permanent cure can not be reasonably hoped for in less than three or four months, and in some rare cases the continued use of Pe-ru-na for one year has been necessary to effect a permanent cure. But, unless the case is very old or complicated, a permanent cure is sure.

A valuable pamphlet of thirty-two pages, setting forth in detail the treatment of catarrh, coughs, colds, sore throat, bronchitis and consumption, in every phase of the disease, will be sent free to any address by The Pe-ru-na Drug Manufacturing Co., of Columbus, Ohio. This book should be in every household, as it contains a great deal of reliable information as to the cure and prevention of all catarrhal and kindred diseases.

### We Sell Live Stock.

Our cash sales for 1890 were \$1,904,199.38, total business exceeded two and one-half million dollars. Established since 1880. Market reports free and consignments solicited from stockmen, by OFFUT, ELMORE & COOPER, Room 14 Exchange Building, Kansas City Stock Yards.



## THE ST. JOE,

The Latest, Cheapest and Best Hive made. Send for a sample hive made up, with sections and starters, only \$1.25. Satisfaction guaranteed. Circulars free.

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## BEE SUPPLIES

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pleasant and profitable work send us your address. Act quickly. The business is easy to learn and our instructions are so profuse and plain that a person with or without experience succeed from the start if they go ahead as we direct. Ladies earn as much as men. Boys and girls make good pay. No risk whatever. Capital unnecessary. All who engage are surprised at the ease and rapidity with which they are able to make money. A trial will cost you nothing. Make a start.

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## The Topeka Tribune

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# The Horse.

Open Letter--No. 3.

THE PACER NO LONGER A STANDARD TROTTER.

EDITOR KANSAS FARMER:—In reply to all inquiries as to our status since the meeting of trotting horsemen at Chicago, April 6, will say: Pacing interests had tried to introduce their pacing stock into the Wallace Trotting Register and failed, and had then rightly organized and incorporated their own register company for pacers exclusively. After which the Chicago Trotting Horse Breeders' meeting of 1891 occurred and overthrew Father Wallace, the act being the outgrowth of three potent influences: (1) Mr. Wallace's personal unpopularity; (2) an itching for a divide of the fat fee profits of registration, and (3) a desire to boss and monopolize registration. The itching for fee profits and monopoly of registration caused breeders of trotters, who had cordially hated and long and persistently knifed the pacer, to face square about at the Chicago meeting, and though they opened only a little (2:25) back door, they admitted the so-called "ill-bred wigglers" to standard rank in their trotting register as "standard trotters," entirely ignoring the fact that a register for pacers had incorporated, and was even then printing Vol. I of its register. There were less than 400 out of the thousands of breeders of trotters in the country who assumed the responsibility of opening even the little back door to pacers, and they refused to have the word "pacer" in the corporate title to the "mongrel" register company they proposed to operate. It was a fat chance, however, so long as the established aristocratic "charmed circle" of standard rank, as a trotter, was opened to pacers. But the act spoiled the purity and injured the value of the trotting register, and soon a powerful press voiced a storm of public opposition, formed inside as well as outside of fee dividend influence, and on the 6th of this month the noble band of 400 (Balaklavans) charged in solid column, without a word of explanation, down the "mongrel" hill they had so bravely but unwisely charged up twelve months before. They kicked the pacer out of the trotting standard numbers, after their year's campaign had let in about 1,000 pacers ("lateral-gaited trotters"), and turned them loose to roam at will in the celestial pastures of the elect, as so-called "plebeian" monuments to fee-bred foolishness, led on by individual selfishness which trod under foot an allegiance to a community of interests which every sense of right and justice should have held as sacred. The pacer, now not eligible to the trotting standard numbers, where is the charm for the owners of pacers in the back leaves of a trotting register? Vol. VII of "Wallace (American Trotting) Year Book," the first product of the new Trotting Register Company, contains 997 pages, of which twenty-two whole pages are generously (?) devoted exclusively to the pacer. This shows liberality and encouragement to the pacing interests with a vengeance. Is it any advantage, since pacers are kicked out of the trotting standard numbers, to enter them in the back pages with a cypher "0" before him as a sort of filler in the tail to a trotting kite, when you have, and can control a register of your own, incorporated for the exclusive building up of a breed of pacers? The National Standard Pacing Horse Breeders' Company took every precaution to avoid conflict and confusion with the trotting register, and the pacing register, first in the field, was, and is, entitled by every consideration of fairness and business courtesy and right to the field as to registration of pacers, and to courteous business consideration at the hands of the Trotting Register Company. Has it been accorded to us? We are solicited by some of the best breeders of trotters in the country to open a superior, or "advanced standard," and register trotters. We are well equipped and can readily make the move, even if it took some years to build a foundation, and it would clearly be as fair for us to invade the field of the trotting register as it was for them to attempt to interfere in our proper sphere. Their aim has been, and clearly is, to despoil our pacing register and build up a fee monopoly, at same time keep the pacer in background as in the past. But the attempt has failed; we live and grow, and confidently, and we think properly, appeal to

all breeders or owners of pacers to continue to support, and thus directly aid in building up a breed of pacers through the pacer's register, instead of aiding a back-door cypher standard for pacers in a register devoted solely to the interests of trotters owned and controlled by men, 99 per cent. of whom have for years shown only hostility to the pacing horse we so much admire. Our stud book (for pacers only) will continue to be administered with energy, promptness and fairness, on a 2:30 basis; the same fee (\$1) to all. Our Vol. II will contain a great 2:30 list of pacers, as also a great list of sires and dams who have produced 2:30 pacers. We are the oldest incorporated company in the field devoted to pacers, and expect the active assistance of all owners of pacers. This company is not ashamed of the word "pacer" in its corporate title. Thanking the press for its uniform kindness and fairness, and the public for its confidence and support, very respectfully,  
THOS. C. PARSONS,  
Registrar, The National Standard Pacing Horse Breeders' Co.  
Cleveland, O., April 20.

### Fastest on Record.

PACING TO HARNESS.

One mile—Direct, Independence, Ia., September 4, 1891.....	2:06
One mile, by a yearling colt—Rollo, Independence, Iowa, October 27, 1891.....	2:28½
One mile by a yearling filly—Fausta, Stockton, Cal., November 24, 1891.....	2:22¾
One mile by a two-year-old colt—Manager, Independence, Ia., August 23, 1890.....	2:16¾
One mile by a two-year-old filly—Alice Wilkes, Cambridge City, Ind., September 23, 1891.....	2:23¾
One mile by a three-year-old colt—Manager, Independence, Iowa, September 6, 1891.....	2:11¾
One mile by a three-year-old gelding—Adonis, San Francisco, Cal., October 25, 1888.....	2:14¾
One mile by a three-year-old filly—Yolo Maid, San Francisco, Cal., October 13, 1888.....	2:14
One mile by a four-year-old colt—Strong Boy, Lexington, Ky., October 17, 1891.....	2:12
One mile by a four-year-old gelding—Arrow, Stockton, Cal., October 2, 1887.....	2:14
Adonis, San Jose, Cal., October 5, 1889.....	2:14
One mile by a four-year-old filly—Gold Leaf, Napa, Cal., August 8, 1889.....	2:11¾
Fastest mile by a stallion—Direct, Independence, Ia., September 4, 1891.....	2:06
Fastest mile by a mare—Crocket, Independence, Ia., August 30, 1890.....	2:10
Fastest mile by a gelding—Johnston, Chicago, Ill., October 3, 1884.....	2:00¾
Fastest mile over half-mile track—Roy Wilkes, Decatur, Ill., September 3, 1891.....	2:14¾
Fastest four consecutive heats—Hal Pointer, Terre Haute, Ind., October 6 and 7, 1891. Direct won first heat.....	2:13, 2:11, 2:10¾, 2:12¾

PACING TO WAGON.

One mile—Roy Wilkes, Independence, Ia., October 30, 1891.....	2:13
Fastest mile in a race—Johnston, Detroit, Mich., July 20, 1887.....	2:14¾

TEAM PACING.

One mile to wagon—Richball and Westmont, Providence, R. I., September 11, 1883.....	2:10
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PACING UNDER SADDLE.

One mile—Johnston, Cleveland, Ohio, August 3, 1888.....	2:13
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PACING WITH RUNNING MATE.

One mile to wagon—Westmont and mate, Chicago, Ill., July 10, 1884.....	2:01¾
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### Chicago Horse Market.

J. S. Cooper, commission salesman of horses, Union stock yards, Chicago, says: "The tone of the market for the week ending to-day (April 30) has been strong, firm and active, the receipts quite liberal and the buying on a scale large enough to absorb the offerings. Drivers and coach horses, for which the demand is daily becoming larger, are very scarce and those on sale command good prices. Streeters and chunks were in good demand, with fairly good supply and prices firm and steady. The business of the month, while not quite as large as that of March, was more satisfactory to shippers, and prices stronger. The sales of the week were 453 horses, and of the month upwards of 1,600. The following is summary of prices: Streeters, 1,200 pounds, \$100@120; 1,250 to 1,350 pound chunks, \$125@140; 1,400 pound express horses, \$160@190; 1,600 pound draft horses, \$190@230; coach teams, \$400@700; drivers, \$130@200.

### The Curry-Comb.

The brush and curry-comb should be used freely. So should the washtub and sponge when feet and legs are dirty. It is easier to wash and keep the legs clean now than to cure the scratches after awhile. The end of a barrel makes the best foot-tub you can get. Saw it off about ten inches from the end, then nail a board underneath the bottom so that if the horse should put his weight on it it will not burst. You will find that the horses will rest much better during the night if you clean them up well in the evening. A good night's rest means better work the next

## WE GIVE A SET OF HARNESS (as shown in Illustration) FREE



to any one who will sell Six Sets for us. Regular price for this Harness is \$12.00. We sell it for spot cash with order for \$5.25 in order to introduce our goods and show Buyers of Harness how to save money. We are the largest manufacturers of harness in America, and use only the best Oak Tanned Leather in our work. We sell Harness for \$5.25 per set and upward. If you want a SET OF HARNESS FOR NOTHING order a sample set and sell Six for us. The money paid for sample will be refunded when you order the Six Sets (same as sample). Address all orders to  
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day. There is where the pay for such work comes in. Besides, if you curry the teams well in the evening it will not take so long to clean them up in the morning. If you want to know how a horse feels that is not groomed after a hard day's work, go to bed without washing your face and hands. If you want to know how a horse feels without bedding in his stall, try sleeping on the hard floor in the corner of the room. Put yourself in the horse's place in imagination for awhile and you will readily see why you should treat him better. Over-feeding is just as bad for a horse that works hard as under-feeding. There is a "happy medium" which should be sought and carefully followed. Corn is too heating for a horse that has to work hard in the warm days of spring. Oats are much better. A good chop is better still, if fed but once or twice a day.

Arrangements are being made to build a kite-shaped track at Ellsworth, Kas. Sunol has been shipped to Charles Marvin, at Meadville, Pa., and will go into training with the object of still farther reducing the record.

A match of \$5,000 has been made between the pacers Direct and Hal Pointer, to take place during the Grand Rapids, Mich., meeting in August.

The annual American Fat Stock and Horse Show is announced to be held in the mammoth new building erected for the purpose, at the Union stock yards, Chicago, on November 16 to 26 next.

When Kl Curry 2:18½, by Mambrino Bruce, started trotting there was a mortgage on D. H. Kyger's farm at Darrtown, O., and everything was going the wrong way. The resolute old mare, however, by her winnings lifted the plaster and started the old man on the road up-hill again. But for all that she is treated worse now than the average farm horse.

The man who argues that the supply of trotters exceeds the demand is one of that class that does not read a great deal. With the numerous new trotting associations daily being organized throughout the country, and the increasing demand for this class of horses in foreign lands, it looks as if the demand will exceed the supply. Every day reports of sales of American trotters to foreign parties are made.

You may look the country over and you will find that good farmers invariably have good teams. In short, the team is indicative of the farmer, and good teams, like good farmers, are the exception rather than the rule, is the way a Texas contemporary puts it. As long as farmers out grass with a soythe, wheat with a cradle, and cultivated much of their crop with a hoe, the necessity of good teams was not so great, but now that horse power is used in nearly all of our farm operations too much importance cannot be given to the item of teams. More attention should be given to horse breeding if any effort is to be made to improve farm methods.

N. Newton has eight or ten head of horses in training at the Topeka track, among which are several very promising. Blizzard (pacer) 2:24¾, is being worked by Mr. Newton, who thinks him able to reduce his record this year. He also has a bay mare out of the dam of Blizzard that is quite a trotter and likely to enter the 2:30 list this year. Dr. Pritchard's three-year-old colt by Riley Medium and Dr. Hamilton's yearling by the same sire are both looking and feeling well and show symptoms of speed. The Hamilton colt is full brother to Nina Medium 2:25. Mr. Newton is a careful, painstaking trainer and has been very successful with the horses placed in his hands.

"As between the standard-bred trotter that can't trot and his non-standard-bred brother that can go some, choose the latter every time. Pedigree cuts no figure with me, unless there is merit behind it," says Monroe Sallsbury, of Plesonton, Cal., the owner of the great pacer Direct, and he adds: "We are carrying this standard business to extremes, and the business of breeding trotters must eventually suffer from it. I expect the breeders of the country to throw up their hands when I say I do not care a rap for pedigree unless the horse can perform. In our haste to produce extreme

speed we are leaving out the important elements of style and roadster qualities," and he is also of the opinion that Direct will do his mile in 2:04 or better during the coming season.

### Standard-Bred Filly.

I have for sale a yearling filly, sired by Honor 6694, son of Red Wilkes; first dam by Cortander 2:29¾, second dam by Daniel Lambert. She is a finely-formed, good gaited and pleasant filly and will be sold low. Address W. P. Popenoe, Jr., Berryton, Kas., or call on N. Newton, at fair grounds, Topeka.

### HINTS ON DAIRYING.

"Hints on Dairying," by T. D. Curtis, the veteran authority on dairy matters; regular price 50 cents. The book contains over 110 pages and is nicely bound. It treats fully of the history of dairying, necessary conditions, dairy stock, breeding dairy stock, feeding stock, handling milk, butter-making, cheese-making, acid in cheese-making, rennet, curdling rooms, whey, etc. We have on hand a limited number of these valuable books which we will close out at half price—25 cents, or we will send the book free for one new yearly subscriber and \$1. Order early if you wish to secure this rare bargain. Address KANSAS FARMER Co., Topeka, Kas.

## Orange Chief 4154.

### STANDARD-BRED HAMBLETONIAN STALLION.

Full brother to { LEM, record 2:27.  
DIXIE, trial 2:30.  
CLARETTE, trial 2:39.

Sire, Orange County 2992 by Hambletonian 10. Dam, Clara by Webber's Tom Thumb; 2d dam by Kaiser's Mambrino by sire of Mambrino Chief 11. Dark bay, 15½ hands high, fine style and action, good disposition, speedy, and a great sire of style and speed. Will be kept at State Fair Grounds. TERMS: \$15 to insure.

J. E. POWELL, Manager, TOPEKA. A. T. Daniels.

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Abundant references from patients. Send for question blank.

The Home Circle.

To Correspondents.

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

Blossom Time.

Spring came with tiny lances thrusting,  
And earth was clad in peeping green;  
In russet bark, the twigs encrusting,  
Tenderest blossom-points were seen;  
A robin courier proclaimed good cheer:  
"Summer will soon arrive for I am here."

And now from cherry boughs in flower  
The languid breeze arousing shakes  
With every honeyed breath a shower  
Of feather snow in drifting flakes;  
And apple trees in bloom like ricks of white  
Are veiled with smoky, amethystine light,

Ah, little soul, on thy first spring  
Unclosing merry, puzzled eyes,  
Would that a father's thought could bring  
Prophetic counsel more than wise  
To guide thee as a father's love would yearn,  
Thou hast so much to suffer and to learn!

I cannot live thy life for thee,  
My precepts would be dull and trite,  
Barren as last year's leaves to me  
Beneath the apple blossoms white;  
But in thy new horizon's vaster range  
Our hearts close knit shall feel no chilling  
change. —New England Magazine.

An Early Crocus.

Thrushes shiver in the trees,  
Woods are brown and skies are gray;  
Sharp and piercing is the breeze  
Sweeping o'er the hills to-day;  
But a flash of yellow flame  
In the garden bright and clear  
Makes a watchful merle proclaim  
Spring is near.

Soon its sisters shall arise  
In a serried golden line  
Neath the gleaming of blue skies  
Radiant in the glad sunshine;  
And the nodding cowslips gay  
And the violets shall appear,  
And a hundred bird notes say—  
"Spring is here!"

KINDERGARTNING.

Kindergartning is a system of child training which is as yet in its infancy. It is understood by few and therefore unjustly condemned by many. What is more needful and important than to have the education of our children begun aright, not only from the time they enter the primary schools, for by that time great and lasting changes will have taken place within the little ones' natures, but from the very beginning of life?

This is what a right system of kindergartning will do.

To lay the foundation for this, Frederic Froebel, the father of the kindergarten, gave his life. His motto was, "Let us live for our children," and this was the key-note of his life.

What was this man's life as a child? Was it happy and innocent, as all child life should be? Far from it. Bereaved of his mother before he was a year old, little Frederic was left to the care of an ignorant maid-of-all-work. His father, a busy clergyman, had neither time nor inclination to look after the child; so up to the time he was 4 years old, Frederic lived without love and sympathy, although his whole soul yearned for that love. When Frederic was 4 years old his father married again. The boy had always longed for a mother, and now, he thought, he would have some one to love him, and so it turned out. But at the end of two years, when a little son of her own came, his step-mother, who might have made life beautiful for the little boy, turned against him, and ever afterwards was his worst enemy. So the pure love of his childish heart was cast away by its unworthy object. It seems incredible that any woman, especially one to whom God had intrusted the sacred office of motherhood, should so blight a sweet, confiding life. Listen to his own pathetic description of this life: "Dishonorable things were not only demanded of me, but directly attributed to me, and this in a way that left no doubt of the impropriety of the thing desired and the falsehood of the accusation." Being told upon every occasion that he was a "bad boy," was it any wonder that he should think that he might as well be bad as good? What was the use of being good when no one would acknowledge it. But when he was 10 years old a new life dawned for Frederic. An uncle on his mother's side saw his lonely, cheerless condition, and took Frederic to live with him. Here was a transition from a life of harsh, willful misunderstanding to a life of quiet, trustful sympathy. What a revelation this new home was to him. Instead of discord, harmony; instead of harshness, gentle-

ness; instead of being obliged to stay indoors all day with a scolding step-mother, he had freedom and could roam at will about the woods and fields he always loved so well. At all times a gentle and thoughtful child, this new life, contrasted with the old, made a great impression upon him, and we owe to this checkered child-life much of the inspiration that in after years gave to the world a system which, if carried out, would make every child happier and more useful, every man and woman better and nobler.

It is generally conceded that education should begin with the first dawn of reason in the child. Psychologists tell us that for the first two months after birth the infant senses seem to slumber. They are aroused by nothing save food, warmth or pain. But soon the little human being notices its surroundings; and at this time Froebel steps in with his first gift, which consists of six soft worsted balls of different colors. One of these balls is suspended by a cord over the child's bed. By and by the little one notices the bright color, when the ball is gently swung to and from the child. As the faint gleam of reason grows brighter, several balls of harmonizing colors take the place of one ball, and are finally given to the child. There are many little plays suggested for this period, as, to swing the balls in different directions, up and down, accompanying the movements by singing; hide the ball in the hand, opening and closing, so as to conceal and reveal the ball; have the child catch and hold the ball while the mother holds the string, and so on, others that will suggest themselves.

"But what is the use in all this?" many will say. "Why not let the babe alone, to grow up the way we have done?" "Better let well enough alone." But the old way is not "well enough," so it had better not be left alone. Your baby is a human being, possessed of his senses, and you are to call them into life. It is not "well enough" that he should always be put in the same corner to lie and await your pleasure, with nothing to look at but bare walls and ceiling.

You may laugh at Froebel's balls and call them nonsense. Very well, we will not argue about that now; but any mother will acknowledge that she would be glad to know of some way to keep baby from being restless when he awakens. Let me tell you the secret: Do not keep baby in the same place and surrounded by the same things all the time. If you have a bird, put the cage at the foot of your little one's bed so he can see it when he awakens. Put him in a place where he can see the pretty flowers, or a sunbeam on the floor, or a bright picture. The mother of a three-months-old babe said to me a short time ago: "You can't think what a long time baby lay without crying this morning. When he awoke I took him into grandma's room, where he had never been, and he lay there looking at the bright flowers and around at the pictures for an hour, and he looked so sweet when I went in to take a peep at him that I just couldn't let him lie there any longer."

This simple plan is certainly worth giving a trial, and if persevered in, it will not only lay a foundation in your child's mind for a love of the beautiful in life, but will make the task of "taking care of baby" easier. LILLIAN WORDEN.

Emporia, Kas.

Works of Art by Twelve Famous Artists.

Sometimes a magazine varies its plan of make-up for a single number, in a way that makes the issue unique. The *Cosmopolitan* published one number some months ago filled entirely with contributions from women. In the same way the May issue of the *Cosmopolitan* will be noteworthy on account of the change in the style of illustration. With hardly an exception, the number is entirely made up of original works of art, and all by the best artists that could be found. There has never been a number of any magazine that contained so high a class of illustration, and the names of Walter Crane, the English decorator, W. M. Chase, E. W. Kemble, F. Remington, C. S. Reinhart, etc., are enough to distinguish the issue alone.

"A wolf in sheep's clothing"—the substitute offered by the "cutter" as being just as good as Ayer's Sarsaparilla. If you don't want to be bitten, insist upon having Ayer's Sarsaparilla, even if it is a little dearer. Depend on it, it will be cheaper for you in the end.

GOOD LUCK.

Dr. Price's Cream Baking Powder is often called the Good-Luck Baking Powder.

Owing to the fact that good luck always attends the use of Dr. Price's, it is not essential to use it the moment it is mixed nor is it required to have the oven always just so, as in the case with ammonia or alum powders. It is not luck after all, but the exact accuracy and care exercised in the preparation and combination of all the ingredients of Dr. Price's Cream Baking Powder. Competent chemists are employed to test the strength and purity of each ingredient. Nothing is trusted to chance. Hence; it is always uniform in its work.

House wives never fail to have "good luck" in making most delicious bread, biscuit, pastry and cakes that remain moist and sweet. Only Baking Powder that contains the white of eggs.

Dr. Price's Cream Baking Powder is reported by all authorities as free from Ammonia, Alum, or any other adulterant. In fact, the purity of this ideal powder has never been questioned.

Farmers' Homes.

"Oh, how I hate those pots and kettles! Take my advice and don't marry a farmer." These lines came before me in the household department of a prominent magazine not long ago; they have run through my mind many times since, and I have tried to solve the mystery. When a child I learned that if I disliked a piece of work the longer I looked at it the harder it looked to accomplish; consequently, the sooner I got it off my mind the better I felt, and if I were that woman the first thing I would do would be to get those pots and kettles behind the sink door, all cleaned and dried. I wonder if city and village housekeepers ever have pots and kettles. This idea that a farmer's wife's burdens are greater than those of others is a very mistaken one. She who takes hold of life with that idea will make existence a burden where'er you put her. One of the greatest burdens of a housekeeper's life is almost entirely lifted now; it is the butter-making. Go where you will, you must eat, sleep and cook, and unless you have an abundance you must work. Nowhere but on a farm can all the luxuries be had without money, and as a reward for a little work. Look at the delicious berries from the middle of June until the middle of September! How the city man would enjoy that delicious honey or maple syrup! How you enjoy that delicious cup of coffee or dish of oat meal, with its delicious cream! I saw a two-year-old country baby who almost lived on oat meal, refuse to touch it with city milk on it; turning to her mamma in disgust, she said: "Dat ain't oat meal." I know a farmer family who used last year, on their own table, over 300 quarts of berries, 25 gallons of maple syrup, nearly 200 pounds of honey, and all the fresh vegetables they could raise besides; the doctor bill was not \$5, and the family was large. Had they had to buy them, they would have had to go without; a poor man cannot afford such luxuries unless he can raise them for himself. Some one says it is lonesome on a farm. Why is it? Good books and papers are cheap; every sitting-room may have its table full. Music is not a luxury, but a necessity now. A horse and buggy will soon carry you to your neighbor's for a quiet chat, Chautauqua circles, singing clubs, picnics. Everything that can give pleasure is at hand. Make your work as easy as possible by calling into it all the little hands that can help; teach them that work is

honorable and idleness a sin. Teach them that they only make work dishonorable in the manner that they do it; put it under a system; do not do ironing after supper, but do it in the forenoon while the dinner is cooking or some baking is going on; don't sew all the evening, but give that up to games with the little ones, or stories until their bed time, and take the rest for your own home reading or your fancy work, if you prefer. Make home just as pleasant, with its books, pictures, flowers and music as your means will permit; carry a sunny face; make everybody who visits you think it is one of the most cheerful homes they were ever in. If you help your husband to carry his burden of business, as most farmers' wives do, let him help you carry yours; and there will go from your home noble men and women to make other such homes. I fail to see the objection to a farmer's life.—*Farmer's Wife, in Wisconsin Farmer.*

How to Get a Handsome Husband.

"When'er some lucky Indian maiden  
Found a red ear in the husking,  
'Muska!' cried they all together:  
'Muska!' you shall have a sweetheart—  
You shall have a handsome husband."

The handsome man always admires the beautiful woman. Then simply make yourself beautiful. Remove all blotches, pimples, "forked sings of turkey tacks" from your features; by the use of Dr. Pierce's Favorite Prescription, a tonic to the nervous, circulatory and procreative systems. Its use brings roses to the cheeks, and sparkle to the eyes. Take it, and you will, like the Indian maiden, find a "red ear" in good health, an omen of future happiness. Guaranteed to give satisfaction in every case, or money paid for it refunded.

We have far too many half-baked preachers, lawyers and doctors, and the mill sare turning out fresh grists every day.—*The Examiner.*

TUTT'S  
Tiny Liver Pills

as an anti-bilious and anti-malarial remedy are wonderful in their effects in freeing the system of biliousness and malaria. No one living in Malarial Regions should be without them. Their use prevents attacks of chills and fever, dumb ague, bilious colic, and gives the system strength to resist all the evils of an unhealthy and impure atmosphere. Elegantly sugar-coated. Price, 25c. Office, 39 Park Place, N. Y.

# The Young Folks.

## The Robin's Song.

Welcome, dainty robin! Signal of the spring!  
With the breast of red-brown and the satin  
wing,  
Filling with the glory of thy limpid song,  
Wood and meadow and meadow—clear and full  
and strong.  
Such an ardent wooing, tender, brave and  
sweet,  
Undismayed by changing skies, never met  
defeat!  
And the earth, replying with the spring's soft  
breath,  
Speaks the resurrection—life—that follows  
death!

Bravo, robin redbreast! with the shining wing,  
Let thy note exultant, loud and louder ring!  
Till the woodlands echo with the glad refrain,  
And the soft winds murmur, Spring has come  
again!

Leafy buds are swelling, with the swelling song;  
Unbound brooks are laughing, as they dance  
along;  
Tender blossoms springing from the brown  
earth bare—  
Life and joy and gladness waking everywhere!

Ever new the glory that the years repeat,  
Nature's great heart throbbing, all about our  
feet,  
Hill and valley springing into tender green,  
Touched with life and beauty by the Power  
Unseen;  
Hope of joy eternal singing in each breast,  
All the pain and passion lulled to quiet rest!  
Everywhere the promise, speaking clear to  
men,  
"Death is life immortal. We shall live again!"

Sing on, robin redbreast, with the shining wing,  
And the air triumphant, that befits a king!  
From the topmost branches, free the glad,  
proud song,  
Life and joy and gladness to the spring belong!  
—Good Housekeeping.

## BESSIE'S LITTLE TRICK.

"You know what an old fuss my sister Lida is, don't you?" said Bessie to her friend Gertie. "She is always dying to get everywhere an hour too soon, and then she is in a stew because other folks are not ready to start before daylight. She is going to a concert with Aunt Dora this afternoon—"

"Are you going, too?"

"No; and I think it's too bad, for I've got twice as much ear for music as she has!" pouted Bessie. "I've got to spend my afternoon doing a lot of errands for grandma. Well, as I am about to say, Lida is in her room prinking, though it is only a minute or so past 12, and my Aunt Dora is one of the behind-hand people. So, when I passed her door and saw that the key was on the outside of it, I just thought I'd come a little trick on her, and I turned it real easy; and there she is locked in!"

"Suppose your aunt does not wait for her?"

"O, as soon as I have ordered some sugar and things mamma wants from the grocer, I am going home to let her out. I shall not be gone ten minutes. Lida is very easily scared, and when she finds herself locked in she'll have a canplion fit."

"My mother never allows me to play any practical jokes; she says they are dangerous," said Gertie, seriously.

"I must say mamma don't like it either. But she has gone down town and never will know it; for there's one good thing about Lida, she never tattles."

"Suppose something should happen and you'd forget to unlock the door?" Gertie asked anxiously.

"I never forget anything," retorted Bessie, loftily.

"Something might detain you."

"I shall not allow anything to delay me. I'm just as sure to be home in ten or fifteen minutes as—as the sun is sure to rise to-morrow."

"Then we mustn't stand chattering here any longer," said Gertie, with a smile, as she ran along.

Bessie was perfectly sincere in thinking that nothing could or should detain her; but girls 12 years of age have little idea of the uncertainties of every-day life. Her memory was, as she said, remarkably good; but she was very rash in saying: "I never forget."

Just as she was leaving the grocery store she met her brother's wife, who asked her to come home and lunch with her, adding:

"Your mother is there, and she told me to drive around to your house and get you, as after lunch she wants to take you to try on a lovely coat she saw at S.'s, which she thinks will fit you."

Bessie always enjoyed a visit to her brother's cozy little flat. It was full of pretty, new furniture and ornaments, and his young wife delighted to show her delicate china, her embroidered table linen, and the proofs of her culinary skill to her husband's family. So poor Lida was completely forgotten.

After luncheon Bessie went to the store

with her mother and tried on the coat al-  
luded to.

"Yes, that fits very well," said Mrs. Moulton, as Bessie turned first one way and then another. "If you had been melted and poured into it, it could hardly fit better. Here is a darker one, which will suit Lida's taste. I do wish she hadn't gone to that concert. I could—why, what ails you, child?"

For at the mention of her sisters' name Bessie turned as pale as any ghost could be supposed to be.

"Do you feel faint? Sit down here," continued her mother, leading her to a chair. "I thought you were unwise to eat two of those shrimp patties at lunch, after taking that rich chocolate and the hot biscuit."

"It—It isn't that, mamma," Bessie began to sob. "Lida's locked in."

"Lida locked in! Locked in where? What do you mean?" cried Mrs. Moulton, nervously. She was alarmed, fearing that Bessie's mind was wandering.

But when Bessie explained her "little trick," Mrs. Moulton was even more alarmed, for Lida was a nervous, timid girl, but recently recovered from a severe attack of typhoid fever, and not considered well enough to go back to school. What effect this might have upon her she dreaded to know.

Of course they lost no time in getting home; and during the ride Bessie had leisure to repent of her deed, and to realize that no one can ever tell what an hour may bring forth.

Lida had, as her mother feared, become very nervous on finding herself locked in a room on the third floor, with no one in the house except two servants in the basement. She had cried herself into a high fever when her aunt called for her to go to the concert and the maid went to her room to find her, and, as a result, was ill for many weeks.

"I never, never will indulge in a practical joke again, I hope!" Bessie said to her mother one day. "I didn't think so much harm could come of it."

"That is just it; you 'didn't think' of any one but yourself, or anything but your own amusement," answered Mrs. Moulton. "You thought it 'funny' to alarm your sister for a few moments; but, had you made it your rule of life to do to others as you would have them do to you, you would never have touched that key. If Lida had died during her illness could you ever have forgiven yourself for your thoughtlessness?"

"Never, mamma, never! I should have felt as if I had murdered her."

"Then, my dear, remember to be considerate of others' feelings rather than your own, and try to sacrifice your own amusement whenever there is danger that it may be at the expense of another person's comfort or happiness. 'Bear ye one another's burdens' is a command we are apt to forget."—*Christian Register.*

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Believe me, the talent of success is nothing more than doing what you can well, and doing well whatever you can.—*H. W. Longfellow.*

The old saying that "consumption can be cured if taken in time" was poor comfort. It seemed to invite a trial, but to anticipate failure. The other one, not so old, "consumption can be cured," is considered by many false.

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Prof. Snow's report of the weather for April shows the month was a little cooler than the average for the period of twenty-five years. There were twelve rainy days, which is three more than the average, but the amount of rain that fell was only 2.7 inches, while the average for April is 3.2 inches. The wind traveled 15,600 miles, a windy April, the average for the month being 13,747 miles.

The practical application of the work of the Weather Bureau of the Department of Agriculture by farmers themselves is becoming more and more apparent. Just after one of the cold waves which passed over the South not long ago, the following telegraphic dispatch appeared in a Memphis, Tenn., paper, telling of the frost in Mississippi: "No damage resulted to tomato plants, as growers were warned by cannon firing on receipt of Weather Bureau report. Prospects are still good for over 2,000 acres in at this point." Being warned a full day ahead of the coming freeze the "truckers" had time to protect their crops.

As a question of science, Urban W. Bamber, of Frederick, Kas., writes the KANSAS FARMER requesting that some "thorough, practical farmer" tell him whether "there is any science in planting potatoes, vegetables, or any kind of grain, at particular periods of the moon's phases." Our grandfathers and their fathers before them were often quite particular to plant only when the "sign was right." It is somewhat doubtful, however, that any one in Kansas is wise enough to tell when the "sign is right" in all cases. There is perhaps one man who is pretty well versed in such matters, and his sign usually is the ground hog, but that will serve only for February and March. This man is wise as Solomon and publishes a paper outside of the capital of Kansas. Perhaps some of KANSAS FARMER readers will enlighten Mr. Bamber.

While visiting the World's Fair grounds a few days ago the writer observed that the construction of the Exposition buildings is progressing in the most satisfactory manner, and there is no reason for doubt that all will be completed in time for dedication. The rough carpenter work is practically finished on all of the large structures except Machinery hall and the Manufacturers' building, and on these it is in an advanced stage. Six or seven of the buildings have the exterior appearance almost of finished structures, and look like imposing marble palaces. The erection of a number of the State buildings is now progressing. Landscape gardening and other work of beautifying the grounds is being pushed by a large force of men, and sodding, walk-making, and the planting of thousands of trees, shrubs, etc., is in progress. The moving sidewalk is in operation, and constitutes a novel and pleasant feature.

KANSAS STATE FAIR.

At last the Kansas State Fair Association begins to show signs of enterprise worthy of the great State of Kansas. To assist the Board of Managers of the proposed Kansas exhibit in its efforts to secure the most excellent products, so indispensable in fitly representing the agricultural interests of the State at the World's Columbian Exposition, the State Fair Association will, at its fair, to be held in Topeka, September 9 to 17, award the most liberal premiums ever offered by a fair association in Kansas.

For samples of grasses and grains on the straw and on the stalk, premiums will be paid as follows: Thirty dollars for first and \$15 for second for corn, on not less than ten stalks; white and red winter wheat. Twenty and \$10 for spring wheat; red, white and black oats; barley, rye, flax, millet and timothy; orchard grass, English and Kentucky blue grasses; red and mammoth clover and alfalfa; on not less than ten stalks, sorghum, broom and Kaffir corn, and milo maize.

For samples of grains and seeds, \$30 for first and \$15 for second will be awarded for not less than fifty ears of each white and yellow Indian corn. Fifteen dollars and \$10 for not less than one bushel each of white and red winter wheat. Ten dollars and \$5 for not less than one bushel each of spring wheat, white, black and red oats; and not less than fifty ears of sweet corn. Five dollars and \$3, for not less than one bushel of seed each of flax, millet, timothy; blue, orchard and Hungarian grasses; red clover; not less than five pounds of cotton, and not less than fifty pounds of broomcorn in brush.

All samples grasses and grains in the straw and on the stalk are to be in duplicate. The bundles of cereals to be not less than seven inches in diameter; grasses and clovers not less than five inches. The samples should be cut as near the ground as possible, giving the greatest length of straw, be handled with care, perfectly cured, securely wrapped or packed, and shipped by freight, at the expense of the fair association, to L. H. Pounds, Topeka, on or before September 5, 1892, when entries for the above premiums will close.

To each bundle or sack of grain should be attached a tag, giving full name and postoffice address of the grower or party collecting the same.

These samples will be received by the Secretary and placed on exhibition at the State fair without cost to the party sending the same, and when premiums have been awarded, all parties forwarding samples will be notified of the result, and money remitted at once to those to whom awards have been made.

At the close of the fair all samples entered for the above premiums will be turned over to the Board of Managers of the Kansas Exhibit World's Columbian Exposition, to be by them taken to the World's Fair in 1893, one sample of each variety to be entered there in the general display in the name of the party sending same. A card will be attached to each sample giving the name and address of the exhibitor. All duplicate samples to become the property of the Board of Managers of the said Kansas exhibit, to be used in the collective display of Kansas products in the Kansas building at said Exposition.

Since writing the above we learn that the Southern Kansas Fair Association also offer very liberal premiums for the same worthy purpose of assisting the Board of Managers of the proposed Kansas exhibit at the World's Exposition.

For premium lists of these fair associations address L. H. Pounds, Secretary Kansas State Fair Association, Topeka, and W. P. McNair, Secretary Southern Kansas Fair Association, Wichita, Kas.

Henry Clews & Co., of New York, in their weekly financial review for April 30, say: "The position of the grain trade seems to forecast probabilities favorable to our retention of gold. The important information contributed by our Minister at St. Petersburg as to the situation produced by the great famine of Russia warrants the conclusion that virtually no export of grain may be expected from that country out of the next crop, and it is likely to require years to restore Russia to her former status as a source of supplies. A very large hiatus in the world's product of breadstuffs is thus created, and it will devolve chiefly upon the United States, as the principal exporting country, to fill the

vacuum. The inference from this prospect is that, if we have another good crop year, we shall nevertheless realize higher prices for our grain; and, if we should have a poor crop, the consequent still higher prices obtained for the surplus of one hundred million bushels of wheat to be carried over into the coming crop year will be an abundant compensation for the failure, whilst we shall be likely to be enabled to keep our stock of gold in good shape. Thus the prospect for the future of our agricultural interest and for the railroad interest so directly dependent upon it may be regarded as more than ordinarily satisfactory.

CONTAGIOUS DISEASES OF THE CHINCH BUG.

The report of Chancellor Snow, of the State University, on the destruction of the chinch bug pest by introducing contagious diseases among them has just been issued from the State printing office. It constitutes a book of 227 pages and contains information which enables the farmer to command the situation as far as this pest is concerned. The report gives a full account of the work of the experiment station, both in the laboratory and in the field, stating with impartiality both the successes and the failures. The reports of the farmers who used the infection are given in their own words. The spirit of candor which pervades the report inspires the fullest confidence in its reliability and accuracy. The summary of the field experiments shows that of all experiments in 1891, 76.5 per cent. were successful, 13 per cent. were unsuccessful, and 10.5 per cent. were doubtful, while of the experiments made in Kansas 78.4 per cent. were successful. This better success of the Kansas farmer may be due to the greater care and intelligence with which he applied the remedy. The estimated cash value of the crops saved in Kansas by use of the remedy is \$81,538.10.

The fact that in over three cases out of four this remedy was successfully applied, actually killed the pests and put an end to damage to the crops is most encouraging. Doubtless with the skill in its use which will come with experience the farmer will find in this remedy a sure defense against chinch bug invasion of his fields.

As the warmer days now come on it will be well to keep a close watch for these pests, and as remarked in these columns heretofore kill off the first brood even though they are not in sufficient numbers to do serious damage. The first brood lays the eggs for the second, and if the first is promptly destroyed there will be but few of the second brood.

On the first appearance of bugs be sure to write to Chancellor F. H. Snow, Lawrence, Kas., and get the remedy, with directions for using, and then follow directions carefully.

CEREALS IN NEBRASKA, IOWA, CALIFORNIA AND COLORADO.

The Census office has issued the following statistics of cereal production in Nebraska for the census year ending May 31, 1890, compiled under the direction of Mr. J. Hyde, special agent in charge of agriculture: Barley, 82,590 acres, 1,822,111 bushels; buckwheat, 15,358 acres, 120,000 bushels; corn, 5,480,279 acres, 215,895,996 bushels; oats, 1,503,515 acres, 43,843,640 bushels; rye, 81,372 acres, 1,085,083 bushels; wheat, 798,855 acres, 10,571,059 bushels. The total area in cereals was 7,961,969 acres and the total production 273,337,889 bushels, as compared with 3,502,146 acres and 88,039,600 bushels in 1880.

In Iowa, for the census year ending May 31, 1890: Corn, 7,585,522 acres, 313,130,782 bushels; wheat, 585,548 acres, 8,149,787 bushels; oats, 3,752,141 acres, 146,679,289 bushels; rye, 93,707 acres, 1,445,283 bushels; barley, 518,729 acres, 13,406,122 bushels; buckwheat, 25,243 acres, 236,746 bushels. The total area devoted to cereals was 12,560,890 acres as compared with 11,490,795 acres at the tenth census. The following cereals show an increase in acreage as compared with 1880: Corn, 969,378 acres; oats, 2,244,564 acres; barley, 319,868 acres; buckwheat, 8,925 acres. The following show a decrease: Wheat, 2,463,740 acres, and rye 8,940 acres.

In California, for census year ending May 31, 1890: Wheat, 2,840,807 acres, 40,869,337 bushels; corn, 70,303 acres, 2,381,270 bushels; barley, 815,995 acres, 17,548,386 bushels; rye, 27,413 acres, 243,871 bushels; oats, 57,569 acres, 1,463,068 bushels; buckwheat,

664 acres, 10,388 bushels. The total area devoted to cereals was 3,812,751 acres as compared with 2,561,800 acres at the tenth census. There was an increase in wheat of 1,008,378 acres, and in yield 11,851,630 bushels; an increase in barley of 229,645 acres, in oats of 7,622 acres, and in rye of 7,132 acres, and a decrease in corn of 1,478 acres, and buckwheat 348 acres.

In Colorado, for the census year ending May 31, 1890: Wheat, 126,999 acres, 2,845,439 bushels; corn, 119,310 acres, 1,511,907 bushels; oats, 87,959 acres, 2,514,490 bushels; barley, 12,086 acres, 331,556 bushels; rye, 4,615 acres, 54,158 bushels; buckwheat, 117 acres, 2,081 bushels. The total area devoted to cereals was 351,086 acres as compared with 116,121 acres at the tenth census. There was an increase in acreage in all cereals, notably in corn in the north-eastern portion of the State, as follows: Corn, 96,319 acres; wheat, 62,306 acres; oats, 64,936 acres; barley, 7,974 acres; rye, 3,321 acres, and buckwheat 109 acres.

KANSAS WEATHER-CROP BULLETIN.

The Weather Service of the Kansas State Board of Agriculture, in co-operation with the United States Weather Bureau, for the week ending April 30, 1892:

The largest rainfall this week is reported from Leavenworth and the northern tier of counties, where it is above the normal, and from whence it rapidly diminishes to the counties traversed by the Smoky Hill, where less than one-tenth of an inch fell. Further east, 0.88 fell in Brown, and but 0.21 at Topeka, 0.95 fell in Leavenworth, and but 0.14 in Johnson. A large portion of the central and western counties received little or none; a slight increase occurs from Meade to Barber, and extending northeast into Harvey. East of Barber it diminishes again, rapidly increases east of Chautauqua.

The weather has continued cool and cloudy over the larger part of the State, though Cloud, Norton and Greeley report the temperature about normal, and the southwestern counties an average amount of sunshine.

While much complaint is made of the backward spring retarding the crops, yet the last oats sown are up and growing more rapidly than the earlier sown. Wheat and rye are in very good condition, yet grass is not as far forward as usual at the close of April.

Forest trees are slowly turning green. Apples, pears and plums are generally in bloom. Corn planting is being vigorously pushed.

Brown—A few farmers have begun planting corn, yet ground is wet.

Chautauqua—Cool and dry; need a change or crops will suffer.

Cloud—Season is later than usual, yet the conditions were never better for a large crop. Farmers are planting corn. Apple trees just blooming.

Comanche—Wheat is in splendid condition.

Edwards—Slightly warmer, but still cloudy. Wheat and rye doing fairly well, but rain is needed. Early fruit coming into bloom.

Ford—Wheat doing well. Corn planting progressing. Barley not all sown. Some fields of oats and barley two to three inches high.

Greeley—Weather conditions up to date have been favorable to all spring work and crops.

Harvey—Wheat splendid, oats doing finely; too cold for corn to come up; apples in bloom.

Johnson—Spring very backward; wheat sown last fall does not amount to more than 10 per cent. of the acreage sown.

Kearney—Weather continues cool, much more so than usual for this section; warm pleasant weather is anxiously looked for, to be followed by a good rain.

Kiowa—Would like to have a good rain sent this way the coming week.

Marion—Cool, damp, cloudy; wheat improving, all other vegetation starting very slowly; corn-planting and grass very backward.

Montgomery—Temperature about normal, yet the damp cloudy weather retards growth; early-planted corn is coming up slowly; flax-sowing about completed; some cotton planted.

Nemaha—But two days out of the last seven on which the sun shone; planting delayed by damp cloudy air as much as by actual rainfall; forest trees look bare yet, but fruit trees begin to look green.

Norton—The ground is in good condition for work; farmers listing corn.

Phillips—Growing crops doing finely, rather wet for plowing.

Reno—Fruit prospect good; very favorable spring for planting trees, more than ever put out this spring, particularly pears. Sheridan—All small grains doing finely, but grass very backward except alfalfa, which is doing finely.

Woodson—Good week for plowing; too cold and not enough sun for oats and flax; corn mostly planted, some coming up.

## EXPERIMENTS WITH CORN.

Bulletin No. 30, of the Kansas State Agricultural college, lately issued, is devoted entirely to experiments with corn, and contains a great deal of valuable information upon the subject. Among the many experiments made we select a few of the most timely for this issue.

Although a little late for this season, we will first quote from their experiment with large and small kernels for seed, the object of which was to learn if a corn plant grown from a small kernel is just as thrifty and will yield as well as one grown from a large one. Ten plots were devoted to this, five being planted with small, and alternating with them five planted with selected large kernels. The rows were three and one-half feet apart, and the corn thinned to a stand of sixteen inches in the row. The plots planted with large kernels made an average yield of 220.5 pounds of good ears, 23.7 pounds of nubbins, and 69.76 bushels per acre. Those planted with small kernels averaged 216.3 pounds of good ears, 29.5 pounds of nubbins, and 70.22 bushels per acre. These figures show that there is practically no difference in the result, whether the kernels are large or small, provided they are sound. While the small kernels averaged slightly less of round, marketable ears, the deficiency was fully made up by the greater yield of nubbins. If large kernels are better than small ones, says the bulletin, then superiority consists in producing slightly more vigorous plants, which develop a better weight of marketable ears. In company with Prof. Georgeon, the writer visited these plots, while in roasting-ear, and so far as could be judged by the eye, we could not discover any perceptible difference in the vigor of the plants.

A similar test was made regarding the relative value of kernels from various parts of the ear, this difference consisting not only in position but also in size. The treatment of the land and variety of corn was the same as in the foregoing. The butt and tip kernels were taken from the extreme ends of the ears. The kernels from the middle of the ear were, of course, the largest and the best. Fifteen plots were planted by the same method as in the preceding case, five plots to each with the following rate of yield per acre: Butt kernels, 57 bushels of good ears and 9.11 bushels of nubbins—total, 66.11 bushels. Middle kernels, 53.17 bushels of good ears and 9.34 bushels of nubbins—total, 62.51 bushels. Tip kernels, 49.63 bushels of good ears and 11.51 bushels of nubbins—total, 61.14. All of these plots were husked and weighed the same day, October 29, when both stalks and ears were thoroughly air dry. Careful examination failed to reveal any difference in the shape of the ears, or in the extent that they were filled out at the tips, all plots being alike in this respect. There was, however, a marked difference in yield in the three grades, the butt kernels not only producing the highest total yield, but also the highest total per cent. of good merchantable corn, the middle kernels being intermediate and the tips the lowest, both in total yield and good corn, and highest in poor corn.

An extensive experiment was made, covering 240 plots, testing the distance to plant corn for grain and fodder. The rows differed in width from one and one-half to four feet, and the distance between the stalks in the rows from four to twenty inches. The corn was all planted by hand, and when the plant was well under way, thinned to one plant in a place, thus obtaining an accurate stand. In this test three varieties of corn were planted, viz.: St. Charles, Leaming and Pride of the North. The latter ripened by the middle of August and was cut and shocked on the 29th. The Leaming was cut and shocked August 31, and the St. Charles September 14. The lightest yields of corn were invariably found on the plots where the stalks were closest together, and the yield generally increased with the widening of the rows, as well as the distance between the stalks. The distances producing the highest yields were as follows: Pride of the North (surface planted), 3 feet between the rows and 16 inches between the stalks, yielding 45.94 bushels, which included also the highest yield of good corn, 34.92 bushels; listed, 4 feet between rows and 8 inches between stalks, 47.41 bushels, but of this only 21.44 bushels was good merchantable corn, the best yield of the latter, 37.83 bushels, being produced when the stalks were 12 inches

apart. The Leaming (surface planted) gave the heaviest weight of corn when the rows were 2½ feet and the stalks 20 inches apart, which gives 600 square inches to each plant. This yield, 53.67 bushels, is, however, but three-fourths of a bushel more than where the rows were 3 feet and the stalks 16 inches apart, which gives but 576 square inches to each plant, and the latter distance gave a greater yield of good corn. When listed, the best yield was obtained where the rows were 4 feet and the stalks 12 inches apart, namely, 51.29 bushels; but the best yield of good corn was obtained where the stalks were 16 inches apart. The St. Charles produced the best weight, 49.69 bushels, where the rows were 3 feet apart and the stalks 16 inches; but the best yield of good corn was where the stalks were 4 inches farther apart. Listed, this variety gave 48.86 bushels, the heaviest yield, at 4 feet between the rows and 16 inches between the stalks; but as in the preceding case, the best yield of good corn, 43.35 bushels, was where the stalks were 4 inches farther apart.

## CHAMPION KANSAS SHORT-HORNS.

Our detailed report of the Dexter Park sales, held at Chicago, came to hand too late for our last issue. Col. W. A. Harris, of Linwood, Kas., sold forty-three head at an average of \$252. Twenty-five females averaged \$263, and eighteen bulls \$239 each. Col. Harris confidently expected an average of \$300, but notwithstanding the fact that the merits of his stock entitled him to more than that amount, the result fell short of it. Owing to the noise, and the haste of the auctioneer, the following were knocked off at ruinously low prices: Imp. Autumn Glade, red, calved April 19, 1887; bred by A. Cruickshank, Sittytton—M. E. Jones, Williamsville, Ill., \$380. Ermina, red, with white marks, calved March 7, 1890; bred by W. A. Harris, Linwood—J. B. Cottingham & Son, \$160. Imp. Cassandra, red, calved January 27, 1888; bred by A. Cruickshank, Sittytton—S. H. Thompson, Iowa City, Ia., \$250. Imp. Clover Flower, roan, calved October 23, 1886; bred by A. Cruickshank, Sittytton—C. W. Norton, Wilton, Ia., \$180.

The following bulls, also, were captured at very low prices: Ganelon 103264, red, calved June 3, 1890; bred by W. A. Harris, Linwood—J. M. Wilson, Paris, Ill., \$260. Saxon Knight, red, with white marks, calved February 11, 1891; bred by W. A. Harris, Linwood—Robert Thomas, Newton, Ia., \$130. Lascar 103980, roan, calved July 31, 1890; bred by W. A. Harris, Linwood—Newton Rector, Kinderhook, O., \$105. Emissary, red, with white marks, calved March 27, 1891; bred by W. A. Harris, Linwood—R. R. Cochran, Cadiz, O., \$100. Gowrie, red, calved February 19, 1891; bred by W. A. Harris, Linwood—James Callan, Epworth, Ia., \$75.

With these notable exceptions, the remainder of the offering sold fairly well, everything considered.

Of this, the leading American Short-horn sale of the season, the *Breeder's Gazette* says: "When Col. Judy mounted the rostrum Wednesday afternoon to begin the sale of the forty-three head sent forward by Col. W. A. Harris, the pavilion contained the largest gathering of Short-horn breeders seen about an auction sale for several years. The cattle were nicely brought out; all females of breeding age were either safe in calf or had but recently calved, and the uniformly useful type of the cattle was the theme of much favorable comment. The most interesting episode of this successful sale was the tussle between Col. John Hope (presumably representing Mr. H. F. Brown) and Mr. Westrope, of Iowa, for the possession of the handsome two-year-old show heifer, 10th Linwood Victoria, the plum finally falling to the veteran Iowa breeder at \$655. Other points of interest were the purchases of Hon. John Dryden, Minister of Agriculture for the Province of Ontario, the purchase for export of a young bull and a heifer calf for account of Manuel Garcia Sedano, of Mexico, and the purchase by Mr. Robert Bruce, of Darlington, Eng., for ultimate export to Great Britain via Canada, of the eleven months heifer, Rowena by Craven Knight, from a Duke of Richmond dam. It rarely falls to the lot of any breeder to receive such high recognition as was accorded the Linwood herd upon this occasion, as evidenced by these and other leading sales. Iowa in particular seemed especially appreciative,

and becomes the future home of some of the best young Cruickshank bulls in America. The bargain of the sale was Imp. Clover Flower, at \$180. The Emma heifer, Ermina, also went exceedingly cheap at \$160; and some of the bulls were knocked off at prices which lead, in at least one case, to a re-sale privately, after the close, at an advance. It was a good, clean, even lot of cattle, and the average made is exceedingly reassuring in these discouraging times."

## CURRENT NEWS.

April 26.—All Paris panic-stricken at the audacity of the anarchists, who avenge the arrest of one of their leaders by blowing up and destroying property in open daylight.

April 27.—Ohio Republicans in convention at Cleveland. . . . Nebraska Republican State convention in session at Kearney. . . . Seventeenth anniversary of the birth of Gen. U. S. Grant commemorated by the laying of the corner stone of a monument which is to mark the last resting place of the great soldier patriot, on the bank of the Hudson in Riverside Park. . . . Colorado Republican convention passes resolutions favoring free and unlimited coinage of silver.

April 28.—New York State Republican convention declines to instruct delegates to Minneapolis. . . . Congressman Funston renominated at the Republican Second Congressional District convention at Lawrence.

April 29.—A \$50,000 blaze at Coffeyville, Kas.; five of the best business houses destroyed. . . . Central California again shaken up by an earthquake. No damage reported. . . . Several inches of snow falls in Minnesota.

May 1.—Four dwellings and a school house destroyed by a cyclone at Burns, Marion county, Kas. . . . May Day generally observed in two hemispheres.

May 2.—Most destructive fire in the history of Ottawa; several buildings burned, including the street railway barns. . . . Numerous petitions presented to the Senate against legislation closing the World's Fair on Sunday. . . . Cyclone in Oklahoma, destroying houses, uprooting trees and leveling fences. Father and son killed, and other fatalities feared.

## SPECIAL FOR BERKSHIRE BREEDERS.

The KANSAS FARMER is pleased to announce that the American Berkshire Association makes the very liberal offer of the first ten volumes of the American Berkshire Record, as a special premium at the several State fairs to be held this season. The Secretary of the association writes us that this premium will be for the "best recorded sow and litter of not less than five recorded pigs under six months old, bred and exhibited by a resident of the State in which the fair is held." Such offer will make the exhibit of Berkshires for this year one of the largest ever known, and, creating an interest, will add largely to exhibits of other breeds, to the very great benefit of the swine industry.

The liberality of this offering may be better appreciated when it is considered that \$1,100 will be thus distributed in twenty-two States and provinces here named, whose fair associations have already accepted the offer, and will make these premiums a leading feature in their premium lists.

It should also be remembered that these special premiums are to be so distributed that a set of these volumes may be secured in each State.

Fair associations that have not already arranged for this Berkshire offering will do well to secure for the breeders of their States a chance for these volumes; and breeders in States that have not accepted the terms upon which these records are offered, should urge the officers of their State fair associations to place their States among those that will have this exhibit.

The eighteen States and five provinces that have accepted and will make this exhibit are: Kansas, California, Colorado, Connecticut, Illinois, Iowa, Kentucky, Maine, Michigan, Minnesota, Missouri (St. Louis), Nebraska, New York, South Carolina, South Dakota, Washington, West Virginia, Wisconsin, and the provinces of London, Montreal, Ottawa, Toronto, and Winnipeg, Canada. For information in regard to these special premiums, State fair Secretaries

or Berkshire breeders should address Jno. G. Springer, Secretary American Berkshire Association, Springfield, Ill.

## Gossip About Stock.

Among the Kansas shippers to the Kansas City stock yards last week were the following: E. T. Parker, of Gorham, Russell county, two carloads of fancy heifers, which sold at \$3.90. John Lundling, of Columbus, thirty-five head of 1,540-pound steers, which brought \$4.40. Hon. A. J. Kingsley, of Medora, two carloads of cattle.

The attention of our readers is called to the advertisement elsewhere in our columns, announcing a public sale of first-class Short-horns, Thursday, May 19, at Lincoln, Neb. The sale will comprise the entire herd of William H. Bayless, of Highland, Kas., and twenty head from the herd of B. O. Cowan, New Point, Mo. Representatives of the most popular families will be found in this choice offering.

The April receipts at the Kansas City stock yards were 81,184 cattle, 1,059 calves, 198,386 hogs and 52,264 sheep, showing a gain over April, 1891, of 20,469 cattle, 254 calves and 24,554 sheep, and a loss of 10,548 hogs. This is the second largest April receipts on record at these yards.

Col. W. A. Harris, of Linwood, Kas., will soon make a trip to England with a view to visiting the noted breeding establishments of that country. This is a trip he has long had in contemplation. His views and observations of English breeds and breeders will be looked for with great interest by all American breeders.

Says the *Artisan*: "Cotton of a red color is being grown in Georgia, where on an acre the cotton plants have stalks, leaves and flowers, every one of which is a deep red color. This crop is the product of a seed taken three years ago from two stalks of red cotton found in a cotton field. Attempts are being made to perpetuate this variety."

Frederick Douglass has recently secured a place as clerk in the agricultural department for the daughter of his old master in the days of slavery, says *Rural Life*. The lady was brought up in extreme luxury, but has for ten years experienced great privations, and when the case was presented to Secretary Rusk he appreciated its poetic and pathetic aspects. Though Mr. Douglass was once the chattel of this lady's father, and was actually sold at the block like an ox or a mule, he not only exerted himself in her behalf, but agreed not to reveal his own instrumentality in her success. The facts came out, however, in another way.

## Portland and Return.—One Fare for the Round Trip.

For the accommodation of those desiring to visit any points in the vicinity of, or at Portland, in May, during the session of the Presbyterian General Assembly, the Union Pacific will sell tickets to Portland and return at one fare for the round trip. Tickets on sale May 9 to 14 inclusive, limited to ninety days from date of sale.

For any additional information apply to A. M. Fuller, Agent U. P. system, 525 Kansas Ave, Topeka.

When I was young I was sure of everything; but in a few years, finding myself mistaken in a thousand instances, I became not half so sure of most things as before.—*John Westley*.

Throw salt and water on the fire to put it out, and throw the same materials into the churn to make the butter float. Half as much cold water as there is of cream, dashed in when the butter comes, and the churn whirled a few times, will work wonders in the looks of the butter.

In order to cure a cow from kicking, says the *Industrial American*, scratch her awhile, speak low, as if you want her vote and influence at the polls. Bye and bye she will chew her cud, and then you can milk her. Soon she will look for your coming, set her foot back and enjoy being milked. The other way is to give her a kick the first thing, then tell her to "stand around, you old rip!" Then yell, "so there!" Then when she kicks—as she should—take the stool and pound her, using expletives. You will get little milk, but as Bunyan expressed it, you will gratify your doggish nature.

**Horticulture.**

**FARMER'S GARDEN.**

The KANSAS FARMER has many times urged upon its readers the great importance of a good family garden. It is shamefully true that in the great West the majority of farmers seem to think that a garden is of no value, and too small and trifling for serious consideration. Close observation has thoroughly satisfied us that farmers of this class are not to be found among the most successful tillers of the soil; and, furthermore, are not blessed with the most happy homes and cultured surroundings. Again we urge this class of farmers to give this matter serious consideration.

In a paper by M. A. Thayer, President of the Wisconsin State Horticultural Society, and read before a recent farmers' institute, this gentleman gives the following interesting facts, which we offer in support of what we have so often written upon this all-important subject:

"Every farmer has a home market, at least to the extent of his own family. It is the best market and the easiest to supply; there is no competition, no freight and no commission to come out of the proceeds. A half-acre fruit and vegetable garden, well cared for as a market garden, is worth from \$100 to \$200 to any intelligent farmer's family in this State, and yet many farmers say they haven't time to attend to a garden.

"Farmers, are you not losing \$100 to \$200 every year by this neglect? Are you not neglecting the health, comfort and pleasure of your family by this neglect? A good garden will often banish the doctor from your house and the sheriff from your door. It will make the boys and girls love the farm when everything else fails. In fact, it is an important factor in making the home what it should be, 'The dearest spot on earth.'

"I do not recommend every farmer to undertake a fancy garden, any more than I would recommend him to raise trotting horses, or deal only in imported stock; but I do say, don't raise scrub stock, and don't have a scrub garden; there is no money in it, or comfort either. I venture this assertion, without fear of contradiction: I can raise ten bushels of ripe, luscious berries, ready for the farmer's family to pick, with no more labor than you can raise and deliver to me, ten bushels of wheat. You sell your wheat for 75 or 80 cents per bushel, while good farmers came to my berry fields last season and paid me \$3 per bushel for berries, because, as they say, 'It is cheaper to buy berries than to raise them.' What do you think about it?

"Now, I am going to tell you farmers who bought fruit of me last season, just what it cost me to raise that fruit; just how much I made out of you, and just what you would have saved, in money, had you raised it yourself. I had, last year, from my own farm over 2,500 bushels of berries, or about 82,000 boxes, and they cost me, when ready to pick, just 2 cents per box. These same berries can be raised on your farm, ready for your own family to pick, for 2 cents, or at most, 3 cents per quart. So when you buy berries at 10 cents, you are paying at least 7 cents that you ought to save. How much profit did I make on each quart? Let us figure a little. It cost me to raise them ready for picking, 2 cents a quart; to pick them say 1 cent; to box and crate 1 cent; to pack and deliver 1 cent; making a total of 5 cents a quart. My entire crop, good, bad and indifferent, sold at the average price of 8 1/2 cents, leaving me a net profit of 3 1/2 cents on every box.

"In this transaction what did you do when you bought the berries? You first paid cost of raising berries, 2 cents; that is all right; you can't raise them cheaper yourself. You paid for picking 1 cent, which would be a pleasure to your family, and should be saved. You paid for packing and delivery, 1 cent, not necessary and would be saved. You paid the producer a profit of 3 1/2 cents which you ought to save, or, in other words, you paid the producer 375 per cent. above the first cost, and 75 per cent. profit above all costs. Can you afford it, and is it cheaper to buy your fruit than raise it? It is no doubt better to buy, even at 10 or 15 cents a quart, than to go without, but best to raise all fruit needed, in your own garden.

**HOW TO LAY OUT A GARDEN.**

"A little common sense in laying out a

garden will save half the labor of tending it. First let us discard the old notion that a garden must be a little square plot of ground, with a few raised beds, where all work must be done by hand or hoe. That is a scrub garden. I have a plan of a farmers' one-quarter acre fruit garden. It is sixty-six feet wide, and 165 feet long. I would recommend for a vegetable garden another quarter acre in the same shape, adjoining on the side or end. The ground should be thoroughly prepared by covering with barn-yard manure, well plowed in, the top dressed with rotted manure. This should be thoroughly mixed with the soil. Thorough preparation will save much labor in caring for the garden and greatly increase the crop.

"We should aim to do all labor possible with the horse and cultivator, and will therefore stake off the ground in rows running longest way for fruit, seven feet apart, for vegetables two or three feet, leaving a head-land at each end for turning. Always use a line to get the rows straight, as you can then cultivate closely, and save much hand work. Plant all vegetables in drills, and use flat cultivation. Weeds must not be allowed to grow. For a vegetable garden your own taste must decide the varieties and quantity to plant. A general variety coming in succession throughout the season will add much to the pleasure and value of the work."

**New Way to Grow Celery.**

The reason that celery is not more generally grown is the large amount of labor required in handling and banking for the purpose of blanching it. While many plans have been tried to escape this tedious toll, none proved successful, until the Ohio experiment station solved the problem in a manner most satisfactory.

Under the new process shallow trenches six feet wide are dug and the earth taken from them is piled at the sides, for future use. The bottom of the trench is then thoroughly pulverized and heavily manured. When the plants are ready to be transplanted they are set in the prepared trench in rows a foot apart and eight inches apart in the rows. As the plants grow the earth that was thrown out in digging the trenches is drawn around the plants with the hoe. By gradually filling the trenches the celery is banked a little at a time, and without noticing it a part of the work that was particularly tedious is done as the cultivation goes on, and at the end of the season the celery is well banked and nicely blanched.

It will be observed that this plan has many advantages. Celery requires a large amount of moisture, and by this method the trenches can often be so located that they may conveniently be flooded with water drawn to the surface by a windmill. At the Ohio station the experimental plot was on a gentle slope, and water was conducted in a hose to the upper side of it, and when necessary the trenches were partly filled from the regular supply pipes. Still another advantage is that many more plants can be grown on a given area than by any other method yet adopted, as they can be set closer together.

**Bees and Fertilization.**

"Some weeks since," says J. W. Rouse, in *Colman's Rural World*, "I saw a doubt expressed in your columns as to the necessity of bees for the pollenization of fruit blossoms. Anyone may easily make the test himself by selecting a branch of an apple, peach, pear or plum tree and covering a limb thereof with wire gauze, thus letting in the light and air, but keeping out the bees. If then he finds but little fruit developed from the protected branch, and much more from the unprotected branches, he discovers the utility and value of bees as promoters of fertilization. True, the wind will carry some pollen from tree to tree and from branch to branch, but not sufficient to produce one-fourth of a crop of fruit.

"If indeed the wind should be high, or the weather be cool and damp, so that the bees cannot fly during the time of blossoming, the fruitage will be short. Apples and some other fruits, it is said, require five successive fertilizations to produce a perfect fruit. In the matter of clover, the reason we find but few seed in the first crop, in the red variety, is that the bumble bees are very scarce at that season, because the queen bees that go through the winter have to raise a family ere they can begin work; but by the time the second

bloom comes they are numerous and at work, and by their visitations to the blossoms, carrying the pollen with them, they fertilize the flower and perfect the seed plant.

"This has been tested time and again by covering, or otherwise protecting, white clover while in blossom, and in no case so protected from the visitation of bees did the seeds form. Bees have to make thousands of visits to the plants in blossom to get a pound of honey, hence it may be seen that even a few bees play a very important part in maturing a crop producing seed. There are other insects that perform the same office as the bees, but by actual observation it has been found that during the season of early blossoming, twenty bees visit the flowers to any one other insect.

"Bees are charged with doing very great damage to fruit in a dry season, but it is very well demonstrated that whilst they will visit injured or decayed fruit, they are unable to puncture the skin of grape, apple or peach."

**Spraying.**

The Department of Agriculture has issued Farmers' Bulletin No. 7, containing many valuable suggestions on spraying for insects and fungus diseases. This bulletin, as well as other public documents, has thoroughly exploded the charges made by many interested parties that spraying must have a deleterious effect on the fruit and injure it for consumption.

When one pound of Paris green is used for 200 gallons of water (the customary quantity), the amount taken by the fruit would be so small that it would be necessary for an individual to consume several barrels of apples at a single meal in order to secure a fatal dose, even should this enormous meal include all the skins and cores, the stems and calyx ends. But analysis has repeatedly shown that this infinitesimal quantity is all washed off by rains long before the fruit is gathered for use.

No other country in the world has adopted the practice of spraying so extensively as it is done in the United States. Five years ago the number actively engaged in spraying for all diseases of the grape did not exceed half a hundred. Now a fair estimate of the department makes the number at least fifty thousand. Last year, 250 grape-growers estimated, from a combined series of observations, that the actual profit to them of spraying for the black rot and downy mildew of the grape was not less than \$37,000—\$13,000 of which was from New York alone. Of the four fungicides which have been used on the grape, none of them contains a particle of arsenic—the active agent being copper, a poison possessing not one-tenth of the virulence of arsenic, and probably much less. Examinations show that so small a quantity of copper is required for effective spraying that an adult may eat from 300 to 500 pounds of sprayed grapes per day without any fear of ill effects. Hence the pitiable ignorance of the outcry of the English Board of Trade, and of certain editors, in decrying American grapes. It is gratifying, however, to see that some of the best English journals have had nothing to do with these attempts to cripple legitimate trade.

**Hints to Horticulturists.**

A teaspoonful of ammonia in a gallon of the water with which pot plants is watered is a very effective fertilizer.

Every cherry or plum tree that shows any sign of black knot should be cut down and burned. If allowed to stand they communicate the disease to other trees.

The best material to fill flower pots with is the sweepings of city streets. In the country the best material is rotten sods, mixed with enough clean sand to prevent the material from getting hard.

In this country gooseberries are very productive. They are good appetizers and but few fruits are better when ripe. Of late quite a demand has been created for them in the markets, and they are coming to the front as a money crop.

Dandruff forms when the glands of the skin are weakened, and, if neglected, baldness is sure to follow. Hall's Hair Renewer is the best preventive.

The thoroughly great men are those who have done everything thoroughly, and who have never despised anything, however small, of God's making.—*Ruskin.*

**Ayer's Hair Vigor**

Makes the hair soft and glossy.

"I have used Ayer's Hair Vigor for nearly five years, and my hair is moist, glossy, and in an excellent state of preservation. I am forty years old, and have ridden the plains for twenty-five years." —Wm. Henry Ott, alias "Mustang Bill," Newcastle, Wyo.

**Ayer's Hair Vigor**

Prevents hair from falling out.

"A number of years ago, by recommendation of a friend, I began to use Ayer's Hair Vigor to stop the hair from falling out and prevent its turning gray. The first effects were most satisfactory. Occasional applications since have kept my hair thick and of a natural color." —H. E. Basham, McKinney, Texas.

**Ayer's Hair Vigor**

Restores hair after fevers.

"Over a year ago I had a severe fever, and when I recovered, my hair began to fall out, and what little remained turned gray. I tried various remedies, but without success, till at last I began to use Ayer's Hair Vigor, and now my hair is growing rapidly and is restored to its original color." —Mrs. A. Collins, Dighton, Mass.

**Ayer's Hair Vigor**

Prevents hair from turning gray.

"My hair was rapidly turning gray and falling out; one bottle of Ayer's Hair Vigor has remedied the trouble, and my hair is now its original color and fullness." —B. Onkrupa, Cleveland, O.  
Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by Druggists and Perfumers.

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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.

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**Smith's Small Fruits.**

Our Spring Catalogue now ready. New Strawberries, New Raspberries, New Blackberries, 25,000 Edger Queen Strawberry Plants, 75,000 Outhbert and Brandywine Red Raspberries. Write for prices. B. F. SMITH, Lawrence, Kansas.

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AND FOREST TREES. For Wind-breaks, Ornament, etc. Hardiest Varieties, Nursery grown Scotch Pine, 2 to 3 feet, \$10 per 100. Scotch and Austrian Pine seedlings, 12 to 15 inches, \$10 per 1000. Other sizes and varieties in proportion. Over 10 million for sale. Good local AGENTS WANTED. D. HILL, Evergreen Specialist, Dundee, Illinois.

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Small Fruits, Fruit & Ornamental Trees. Good assortment of varieties for the West. "Live and let live" prices. Correspondence solicited. Address **CECIL'S FRUIT FARM & NURSERY,** NORTH TOPEKA, KAS.

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## In the Dairy.

### How to Raise Heifers.

"Right here," says M. King, in the *Ohio Farmer*, "I want to say a word about feeding those choice calves that are to build up our herd. I think it best for the cow, and decidedly best for the calf, to let the latter remain with the cow at least three days. I do not wish you to understand me to advocate letting the calf have all the milk for this length of time. Take all you can get twice a day; the calf will be sure to get enough. When you do take the calf away, the better way is to have them in a stable and quietly drive the cow out, letting the calf remain, so she does not see you take it from her. Keep it where she can neither see nor hear it, if possible. Leave it alone for twelve hours. Offer it some milk warm from the cow. It will generally suck the finger, and about the next feed it should drink alone. You should not feed it fresh milk right along. Give one-half skimmed sweet milk until two weeks old, when it will make a better animal for the purpose you are raising it, if fed sweet skimmed milk with the addition of a very little oil meal or wheat bran, better, in fact, than if fed on whole milk. This manner of feeding will give a growthy calf of large eating capacity, which is very desirable in a cow. We all know that the more a cow eats the more butter she will make. She needs a certain amount to supply her body, and all over and above that she puts into the bucket. Feed a calf on fresh milk and very rich feed, and it will get into the habit of laying on flesh, and it will be hard to get rid of this characteristic in the cow. It is a safe rule to discard any cow that gets fat while in full flow of milk. You may be certain her milk is deficient in butter fats."

The following table, clipped from *Hoard's Dairyman*, will show the digestible nutrients and values of one hundred pounds each of corn, peas and oats. It will be readily seen that in protein, the most valuable of all food elements, peas have double the value of either corn or oats:

	Crude protein, pounds.	Carbo-hydrates, pounds.	Fat, pounds.
Corn.....	8.4	64.9	4.7
Peas.....	18.0	56.0	.9
Oats.....	9.05	44.4	3.9

This certainly should encourage our farmers in a more extensive cultivation of peas, thus growing their own protein, instead of buying it in the shape of bran and oil meal.

### Notes on Dairying.

Even a small dairy well managed means increased fertility.

Milk regularly; it is very important in securing the best yield.

Success in dairying implies close attention to the minute details.

The appearance, not only of butter, but of the package, has much to do with the price realized.

Plenty of good feed and water are necessary factors with every cow in securing a large flow of milk.

With many farmers' wives the failure to make a good quality of butter is due to lack of proper appliances.

With proper conveniences it costs less to make a pound of good butter than a pound of poor, made in the old way.

The only sure way of ascertaining whether or not a cow pays or not is to test her. Guessing at it will never answer.

One advantage with farm dairying is that all of the by-products can be used to good advantage. There should be no waste.

No matter how good the breed of the cow, the best milk and butter produced cannot be secured without first giving the best feed and care.

In speaking of cows slobbering after eating corn stalks cut one inch in length, *Stuart's Agriculturist* says it is due to the sharp edges of the hard stalks which injure the mouth. As a remedy it advises

the farmers to cut as much up at a time as will serve one day, put hot water on it to soften the stalks, add a little salt and that will prevent it.

Gentleness with cows, cleanliness in dairy operations and a thorough knowledge of the modern processes of dairying are necessary to success.

It may not pay the majority of farmers to make a speciality of dairying, but in connection with other products it can readily be made profitable.

The ration best to feed for milk or cream will vary in different localities, and the price of feed must always be taken into consideration in feeding economically.

In nearly all cases where it is an item to secure the largest quantity or the best quality of milk, it will pay to feed the cows a good ration every day, even in summer.

Properly managed, the same food that is required to make a pound of beef will make a pound of butter, but the value of either will depend almost entirely upon the quality.

Many farmers who consider it economical in purchasing labor-saving machinery for doing the farm work fail to see any advantage in having the conveniences necessary for the wife to make a good quality of butter at a low cost.

"The ration for cows is, as a rule, about fifty pounds of silage each, daily," says John Gould, in *Practical Farmer*. "We find that our winter milch cows will not eat to exceed fifty-five pounds, if fed to their full eating capacity. Some will not eat over forty, and others will possibly consume sixty pounds, but only rarely. An acre of good silage should return when fed to winter milch cows, milk at 2 1/2 cents per quart, \$85 per acre in milk. Nine tons of silage presumably grown on a half acre, with \$19 worth of grain, has for the month of January, returned me \$100. This is why I advocate silage as a roughage ration for milch cows."

The man who called sarsaparilla a fraud, had good reason; for he got hold of a worthless mixture at "reduced rates." He changed his opinion, however, when he began to take Ayer's Sarsaparilla. It pays to be careful, when buying medicines.

## The Poultry Yard.

### Care of Little Chicks.

When your hen is about to hatch, says John C. Snyder, of Cowley county, Kas., in *Practical Farmer*, see that you have a roomy, comfortable coop ready for her. We prefer to keep the hen shut in the coop for a few days, until the chicks become stronger, then she can be let out a part of the day if she is not permitted to wander aimlessly about. Chicks must not be permitted to get chilled. They require considerable warmth the first week, and for this reason must be well looked after.

The little chicks should be fed often—not much at a time, but only what they will eat up clean. Every hour or two during the first few days will not be too often, then four or five times per day for a week, after which three times a day will do. We are not much in favor of feeding hard boiled eggs. They will likely cause bowel trouble. If fed in this way they should be chopped very fine and mixed with other feed. We would prefer feeding eggs, if at all, either raw or slightly boiled and mixed with other feed. The best feed we know of is stale bread soaked in milk. It is even better to press the milk all out and feed the bread crumbly. Chicks need but little drink the first few days, but we do not favor keeping it from them for weeks, as some advocate. The bread and milk diet can be varied with oat meal, cooked or dry, rice cooked, and Dutch cheese. After a week they can eat screenings, cracked wheat or cracked corn. Care must be taken that we give them no soft, sloppy feed as it causes too much looseness of the bowels, which will prove disastrous. When a week or ten days old, corn bread crumbled fine may be fed with good results.

Little chicks should have free access to lime, sand and water at this age. They should be made to exercise themselves as much as possible; there is nothing which will promote health among fowls more than plenty of exercise.

There should be a small yard built with a gate so you can enter, where the little

# The Stable Shelf

ought to have on it a bottle of Phenol Sodique for bruises, cuts, sore spots, &c.

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chicks can have their feed placed, and where they can eat without being bothered by the old fowls. A yard six or eight feet square made with lath will answer. The old hens can be fed outside with whole corn or other feed better adapted to their needs, and a saving of the more expensive feed of little chicks.

It will take but little time to provide a few conveniences and not much time to look after the chicks properly, and it will amply repay you to do things in order. Keep them in out of the dew and rain. A few boards in the way of a roof, a foot above the ground, and of any size to suit will be found excellent for the chicks to run under to get out of a shower or away from hawks.

See that their coops are warm enough of a chilly time and well ventilated during the warm season, shut up secure from rats and skunks at night, and not so many with the hen that she will trample them.

If you raise light and dark breeds, mix the eggs when setting so the hens will not make you trouble when they hatch. I raised white and black chickens several seasons and found that if I set eggs under one hen producing white chicks and black under another, they would own none other than the white or black chicks which they hatched and would pick and often kill chicks of the opposite color to their own. I mixed the eggs; they hatched part white and part black chicks, and I had no more trouble with my hens fighting each other's broods.

Variety of feed will of course promote digestion and increase growth. If early broilers and a good market is desired, they must be hatched early and pushed from the start. If you want them for your own use and do not want to take any extra time in preparing for them or feeding them more than is usually done, you can do so, but need not expect such good results.

My neighbors consider that money can be made raising chickens upon the farm and selling to the groceries at even low figures, say \$2 to \$3 per dozen.

It is not such a chore to look after a flock of chicks if there is a love for the work, but neglect of this branch of the farm is not to be commended.

### Many Inquiries.

EDITOR KANSAS FARMER:—I would be pleased to have some one who has had experience with winter feeding hens for eggs, tell me what to plant this spring for next winter's feed. Is buckwheat good egg food? Is the Japanese variety any better than the old kinds? Where can I get seed at the least cost? What time of year must it be sown? What kind of soil? Can it be stacked and fed in the straw, or must it be threshed? Can Russian sunflowers be grown among young fruit trees without injury to the trees? Can Jerusalem corn be profitably grown for chicken feed?

I will give you a receipt for medicine that will cure many kinds of disease in chickens: One ounce each of sulphur, charcoal, asafoetida, cayenne pepper. Mix a small quantity in soft feed.

HARRIET E. MORRIS.

Toronto, Kas.

### Diarrhea in Chicks.

EDITOR KANSAS FARMER:—What is the best thing to do for young chickens that are loose in their bowels and droppings watery, causing death.

Topeka, Kas.

As your diagnosis, or characteristics of the disease are so imperfectly given, we cannot say. However, we mistrust that diarrhea is the trouble. If so, treat as follows: Ground saffron, 1/4 ounce; gentian, 1/4 ounce; red pepper, 10 grains. Give a thimbleful twice a day.

A tree is no better than a man; it cannot be itself if it stands too much in a crowd.

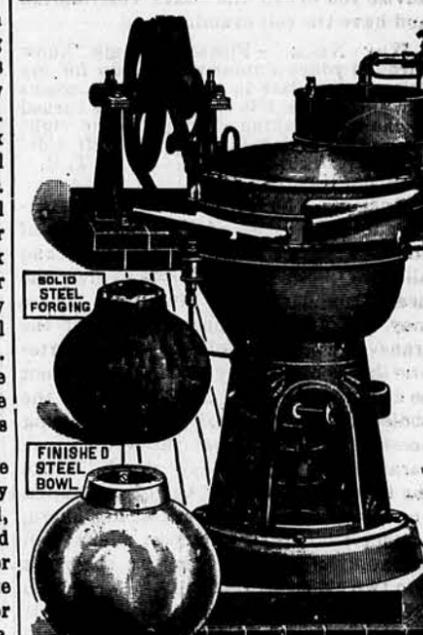
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# The Family Doctor.

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

### Answers to Correspondents.

DEAR FAMILY DOCTOR:—In introducing your department, you said you would try to teach your readers how to live better and longer. Will you kindly suggest to us how to live better and save doctors' bills? Mrs. E. A.

Medicine Lodge, April 25.

The problem is very simple, and can be stated in four words: *Eat and drink physiologically.* The chances are a hundred to one that you, like all other Americans, now violate the first law of good health by eating and drinking simultaneously. You mix food and drink indiscriminately in one grand conglomeration. You wash down your food by drink after drink of coffee, tea, milk or water, without half masticating it. When in a little bit of a hurry you bolt it down in lumps and chunks, and then pour down a small flood of ice water, ice tea, iced milk, etc., as if concluding that a cold bath in the stomach could digest your lumpy food. Death is always at work trying to undermine the house you live in, and by such a course of eating and drinking you furnish him with pick-ax and crowbar with which to prosecute his labor.

The food you eat must be of a digestible and nutritious character and quality. You cannot make good blood, and muscle, and bone, and nerve, and brain, and thought out of tough, leathery meat or decaying fruit and vegetables, or bread with all the nutritious elements taken out of it, just to make it white and nice. A dog will actually starve to death in forty days with all the fine white bread he can eat. It contains nothing worth naming but starch, and starch will not support life. But if you choose good food, and do not eat it properly, you will still get only partial and unsatisfactory nourishment out of it.

In your stomach are countless tiny glands, whose office is to secrete from the blood what we call "gastric juice," and that juice, when properly mixed with your food, dissolves it into fine particles. It breaks up and dissolves out all the bonds of cohesion between the particles of food and makes it so fine and soft that it can be absorbed by the delicate absorbing vessels beyond the stomach. When in health, the gastric juice is secreted and poured out in just the right quantity and quality to digest each meal. The gastric glands only secrete and pour out this juice when there is undigested food in the stomach. You eat your breakfast, and the touch of the food in the stomach sets going the secretion and outpour of gastric juice for its digestion. That juice is just the right chemical strength and quality for its work. But if you pour a teacupful of water into a teacupful of gastric juice you dilute it one-half, and it is no longer capable of doing its work of dissolving the food within the normal time. When the time arrives for the completion of digestion and it is not done, the system sets about getting rid of the undigested residue and sends part of it down the alimentary canal, setting up a variety of mal-conditions there, and a portion of it is chemically decomposed and turned into primary gases that make trouble and ill health, sour stomach, headache, and a great variety of disorders. A very simple rule makes you safe against all these disorders: *Drink only when the stomach is not digesting.* When there is gastric juice in the stomach, keep all other liquids out of it, save those containing a large amount of food element that must be digested. Drink all you desire before eating. It then passes at once beyond the stomach. After commencing to eat, drink nothing for three hours. Leave the gastric juice full strength, and the gastric juice will give you full strength.

FAMILY DOCTOR:—Your department has already been worth more to our family than our great big daily paper. Do you know of a good paper devoted entirely, or largely, to domestic and household matters, and that is intelligently and sensibly edited? "SOCIAL SCIENCE."

Ft. Scott, May 1.

My better half says, upon submitting the question to her, that *The Household*, published at 50 Bromfield street, Boston, Mass., is a delightful surprise to the housekeeper who reads it for the first time. It is practical and helpful. Too many of our domestic magazines go far

beyond the possibilities of living for plain people. Their sapient editors conclude if they can furnish directions for a 25-cent dinner and a \$50 gown, they have bestowed a great boon on womankind. To housekeepers who feed their households on good and tempting food at a dollar a week per capita, and dress a woman neatly and elegantly on \$150 per annum, such magazines are of no use. We want more magazines like *The Household*, whose advice and directions do not involve expenditures outside the limits of ordinary purses. To *The Household's* useful hints and helps about home, so much of musical, artistic and literary miscellany is added that we cannot help wondering that it should all be supplied at a dollar a year.

DEAR FAMILY DOCTOR:—Why did you fail to put in an appearance last week? We looked in vain for your department. Please be sure and answer our call this week. How is the Baker boy? N. J. H. Meriden, May 2.

The Family Doctor was off on a surgical expedition, and had to write two papers for the State Medical Society. The Baker boy is getting well rapidly now from his very serious wound. Some letters cannot be answered this week.

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Official Receipts for 1891.....	1,347,487	2,599,109	386,760	31,740	91,456
Slaughtered in Kansas City.....	570,761	1,995,852	209,641		
Sold to Feeders.....	237,560	17,672	17,485		
Sold to Shippers.....	355,625	585,330	42,718		
Total sold in Kansas City in 1891.....	1,163,946	2,598,654	269,844		

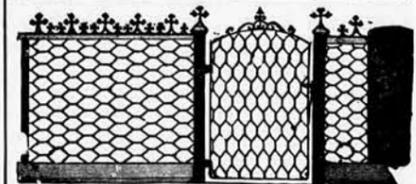
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 2,288 sold in '89  
 6,268 sold in '90  
 20,049 sold in '91  
 60,000 will be sold in '92

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**FOR WEEK ENDING MAY 4, 1892.**

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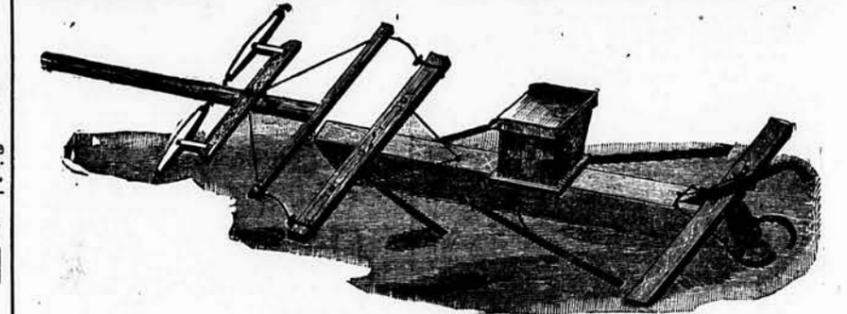
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