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### Grange on the Tariff.

The following is that part of Master J. J. Woodman's address to the National Grange relating to the Tariff:

By our tariff laws, a tax or duty is levied upon the products of other countries, imported into this, from which the revenues of the government are mainly derived. As a general proposition, this tax upon foreign products, coming into the market of this country in competition with its products, must be in some degree protective to the latter, and consequently enhances their market value. This additional cost is paid by the consumer, in lieu of other taxes for the support of the government. This system for providing revenue, is practiced by all civilized and progressive nations.

Free trade would abolish all tariff laws, custom houses, and officers, and allow all other nations to sell their products in our market, without restriction. This would be giving to other nations, privileges not granted to us; and would take from the revenue of the government, three-fifths of the gross receipts. To supply this deficit would necessitate a direct annual tax upon the property of the people, amounting in the aggregate to \$4.20 per capita of our entire population, exclusive of the expense of assessing and collecting the same. As it has been officially estimated that ninety per cent. of the personal property of the country escapes taxation, this burden would fall most heavily upon farmers who own most of the real and personal estate, which cannot be screened from the assessor's eye. For these reasons if no other, farmers are not likely to become advocates of absolute "Free Trade." But few intelligent citizens among us seriously entertain such ideas. Nearly all concede that we must have a "Tariff for Revenue." Hence, the term "Free Trade," as used in our American politics is a misnomer.

The Government must have revenue, and to obtain it without imposing burdens upon the people, will require wiser statesmanship than we are likely to have; and so long as revenue is to be obtained by imposing duties on foreign imports, the system must be one, not only of taxation but of protection. The important question then, seems to be, how can these benefits and burdens be most equally and justly distributed? The great evil in our present tariff, is in its unjust discrimination. A "High Protective Tariff," which builds up monopolies by imposing undue burdens upon the people at large, is high-handed oppression; so a low tariff which cripples home industries and oppressive labor, is equally disastrous, not only to individual, but national prosperity. The great objects to be accomplished by our tariff laws, should be, to furnish revenue, and at the same time give reasonable and impartial encouragement, as far as practicable, to every legitimate industry, and develop every resource of our country; and thus, in the language of our Declaration of Purposes, establish "Proper equality, equity, and fairness; protection for the weak; restraint upon the strong; in short, justly distributed burdens and justly distributed power."

The nation's wealth is in the soil, and general prosperity depends upon its productiveness. If the great arm of agriculture is weakened or paralyzed, all trade, commerce, and manufactures must suffer and decline. Hence legislation which cripples any important branch of agriculture, and takes from the cultivator of the soil the means of

keeping up its fertility, is not only an act of injustice to the farmers, but detrimental to the interests of the whole people and the nation's welfare.

Sheep husbandry is one of the most important agricultural interests of this country, and absolutely necessary in many sections to enable farmers to keep up the fertility of the soil. Flocks of sheep are the best and most available means accessible to the great mass of farmers of this country, for renovating and increasing the productiveness of their farms. They destroy noxious weeds, glean the fields, pack the soil, and return much of value to it. This industry has been encouraged and built up, mainly by the tariff acts of Congress, for the reason that wool cannot be produced in this country with our well paid labor, and expensive wintering of sheep, as cheaply as it can in the warmer countries of South America, Africa, and Australia, where cheap labor and perennial pastures abound. The wool production has been nearly doubled, since the encouragement it received by the tariff act of 1867; although the interest was greatly demoralized by the act of 1872 which reduced the market price of our wool below the cost of production, but gradually recovered to nearly its former prosperity, after the restoration of the duty by Congress in 1874. And yet the price of wool in this country has ruled too low to pay the producer anything above a moderate profit on the cost of production for the last ten years.

There seems to have been no good reason for the reduction of the duty by the last Congress. It reduced the price received by our farmers for this year's clip on an average, five cents upon every pound produced in this country, amounting in the aggregate to a tax of over \$15,000,000 arbitrarily assessed upon this agricultural product alone. The farmers are that amount poorer, and that sum of money has been taken from the legitimate channels of business. In consequence of this, all business and labor have suffered, and whether any corresponding benefit has resulted to any class of our people, except the importers, speculators and manufacturers, is extremely doubtful. As a revenue measure, there could have been no necessity for it. In a report made by General Garfield, when a member of Congress in 1880, he said: "As a revenue measure, the tariff of 1867 on wool and woolsens, has been very effective, having produced \$300,000,000 of revenue in the last thirteen years, an average of \$28,000,000 per annum." Whatever difference of opinion may exist among the members of this body on the question of "revenue" and "protection," it does not seem possible that there can be any division upon this question; and I am confident that no one act can be done, that will be received with more satisfaction by our members, or inspire more confidence in our Order among farmers and business men generally, than for this National Grange to unite its influence with that of the National Wool-Growers' Convention which recently assembled in Chicago, and respectfully ask the Congress soon to assemble to restore the duty on wool taken off by the last Congress and thus right this great wrong.

#### GOVERNMENTAL AID TO AGRICULTURE.

The history of the human race, has fully demonstrated the importance of Agriculture to general prosperity. From the earliest period of man's existence upon the earth, down through the ages of the present time, all progress in civilization, the development of sciences and the arts, and the rise and

fall of Nations, has been marked at every period of the world's history by the importance and encouragement that has been given to the cultivation of the soil.

The earth is, in fact, Nature's great storehouse, from which by intelligent and well-directed labor, man derives not only the necessities, but the choicest blessings and comforts of life, and the main inspiration to moral and intellectual development. A missionary who has spent many years in heathen lands has said: "You must send the intelligent farmer and improved plow and other agricultural implements with the missionary." The heathen lands need to be plowed up, deeply subsoiled, planted and sowed, and with each returning harvest, will be gathered a crop of new ideas; and the dull beclouded intellects of that benighted people, will then begin to act, and they will better understand the plan of Divine wisdom for educating, civilizing and christianizing the human family.

Of the importance which agriculture bears to national prosperity, Dr. Johnson said: "Agriculture not only gives riches to a nation, but the only riches she can call her own." Washington said: "I know of no pursuit in which more real and important service can be rendered to any country than by improving its agriculture." Jefferson said: "Agriculture is the highest calling of man and the surest road and safeguard to a nation's prosperity and liberty." And yet, there is scarcely another civilized nation but what does more to aid and encourage its agriculture than the United States. In 1877, France appropriated for the support of agriculture and commerce over \$20,000,000; Russia for agriculture and public lands nearly \$15,000,000; Austria and Hungary, for agriculture alone, \$5,500,000; Great Britain \$800,000; Sweden \$650,000; the United States for the same year appropriated \$174,686.

It will thus be seen that Russia, our greatest competitor in the market of the world for agricultural products spends, for the aid of her agriculture and care of her public lands, seventy times as much as this country, and little Sweden three times as much as this great nation does for the support of the industry upon which its prosperity and perpetuity depends.

These appropriations among the progressive European nations, are used, principally, for the support of National Agricultural Departments, Experiment Stations, with model farms attached, stock farms and dairy farms, agricultural colleges and farm schools; and for disseminating information relating to practical and scientific agriculture; all aiming to increase the fertility of the soil, and the amount and value of its products; and these results have been fully realized. Both wise political economy and sound financial policy seem to demand that such aid should be given to the agriculture of this country, as may be necessary to produce like results. I desire to direct attention to what I have said upon this question, in previous communications to this body.

O'Donnell, tried for the murder of Carey, was convicted. Roger A. Pryor did not take part in the trial because the British lawyers thought it would injure the prisoners' cause.

At Newry, Ireland, four hundred troops were ordered on duty because of anticipated disturbances between Orangemen and Nationalists.

### Saying too Much—Tariff.

*Kansas Farmer:*

I have not the ability to discuss the Tariff question, but when a man makes so sweeping an assertion as your Chicago correspondent, that all our national financial troubles have been wholly chargeable to the want of protection to our manufactures it is saying more than most intelligent men will agree to. I feel like asking him if the system of banking had not much to do with all our troubles. We had no foundation for the currency that was put into circulation by the banks, and increased at will without regard to the future. All kinds of wild speculations were carried on until some one met with failure and that sent all to destruction together.

The removal of the deposits by Jackson in 1833 had more to do with the disaster that commenced in 1837 and culminated in 1841 than the change of tariff. The fall of the U. S. bank was followed by the setting up of an unlimited number of State or wild cat banks and the issue of shin-plasters by the owner of every peanut stand and corner grocery in the land. Such was the money of that day. Is it any wonder we had trouble? No tariff, however high, could have warded it off. It was too heavy a load to carry and we had to dump it. No doubt we were helped out of the mire by the tariff of '42; but the debris of the wreck of 1837 had been entirely cleared away in '42, and everything was prepared for a new departure which was fully under way in 1843, and prosperity attended all our enterprises up to 1860, save what disturbances arose from our war with Mexico and the political agitation over the admission of California and Kansas.

The change of the tariff in 1846 had no effect on our manufactures, nor in the least contribute to misfortune. The most far-reaching and destructive of all our financial disasters occurred in 1873, and we know that the tariff had nothing to do with it, and our currency was on the best basis of any in the world. What caused such disaster?

Galva, Nov. 28, 1883, GRAY BEARD.

### Photography of Moving Objects.

The dry plate process and special arrangements of the camera, by which exceedingly brief exposures are possible, have enabled the photographer to take views of rapidly moving objects. With particularly sensitive plates some startling results may be obtained, and not only can moving animals and vessels be photographed, but the spokes of the wheel and the fast trotter can be shown with sharp and distinct outlines. Even views from the windows of a quick train can be obtained. The necessary time of exposure has been reduced to such a small fraction of a second that absolute steadiness of the camera itself no longer enters into the problem. The dry plates are gradually driving out the wet ones in the galleries, and those who pose in uncomfortable positions are no longer in danger of being tired out. The artist no longer finds it essential to tell his patrons to "look pleasant," but he aims to tell them something interesting, when the natural expression comes over the face and is instantly caught by the camera. The taking of the baby's picture is no longer accompanied by dread. Much of the best work done with the dry plate process has been by amateurs.—*Scientific American.*

Since the inauguration of the window-glass strike at Pittsburg, a good deal of foreign made glass has been shipped in.

## The Stock Interest.

### PUBLIC SALES OF FINE CATTLE.

Dates claimed only for sales advertised in the KANSAS FARMER.

March 1, 1884—J. C. Hyde, Wichita, Kas.  
April 1—John X. Grimth, Shenandoah, Iowa, Short-horns  
April 10 and 11—Leonard Bro., Angus and Galloways, Kansas City.  
May 6, 7 and 8—Jackson Co. (Mo.) Breeders' Association, Short-horns, Kansas City.  
May 13, 14 and 15—Leonard Bro., Angus and Galloways, Kansas City.  
May 27—J. C. Stone, Short-horns, Leavenworth, Kas.  
May 29—W. T. Hearne, Short-horns, Lee's Summit, Mo.  
June 6—J. H. Potts & Son, Jacksonville, Ill.

### SALES OF HORSES, JACKS AND JENNETS.

February 12, 13 and 14 1884.—Woodard & Brasfield, Lexington, Ky., stallions, brood mares, jacks and jennets. April sale, 22, 23, 24 and 25, '84.

### Care of Horses in Winter.

It matters little about the care of a shaving-horse, or a hobby-horse, or a dead horse in winter or at any other time, because they are not worth much at best, and their care does not affect them much either way. But it is not so with the living horse whose life and continued existence cost money from the beginning, and whose value and usefulness from day to day are affected by the treatment he receives. It is as important to take care of the horse, and good care too, as it is to plow, sow, and reap the fields.

Now that winter is here it is well to remind the reader that horses are very sensitive. They need careful, kind, good treatment, and they deserve it. Touching some of the particulars in which this is most apparent, we quote the following suggestions in a communication written by John M. Stahl and published in the Indiana Farmer:

There are farmers who shamelessly neglect these patient, willing, docile servants at all seasons, but there are exceptions to the general rule and the fact still remains that in summer the horse does the most work and receives the most kindness for it. But the farm horse is frequently neglected in winter. This may not be thought wrong, for then he is called upon to do very little work. But he should nevertheless receive just as much attention in winter as at any other season.

It is true that his work is not severe and that he therefore requires less food to maintain his strength expended in physical effort. But the weather of winter is severe, and storms and cold exhaust him perhaps more than the hardest work in pleasant weather. The summer is a season of labor, the winter a season of rest and recuperation. And for the very reason that the one is a time of work and the other a time of rest should he receive as much care and attention in the latter as in the former; for he is now to gain what he has lost in the past and prepare for the vicissitudes of the future.

In winter the horse must be sheltered. That has been said so many times that I hesitate to say it once more here. But a shelter is properly much more than an enclosure of boards. I believe I am safe in saying that in fully one-half of the stables of this country, particularly of the West, the temperature is below freezing point a good part of the winter. In winter I frequently enter stables in which the manure is frozen under the horses. This may be sheltering them but it is not sheltering them warmly enough by long odds. None of our domestic farm animals are more sensitive to cold than the horse. His body is not compact and has but a comparatively small proportion of fat, and horses do not crowd closely together to keep one another warm as hogs do. A shelter warm enough for hogs or cattle is not sufficiently warm for horses.

But I notice that when the farmer makes the stable warm he excludes light. Is it any wonder that so many horses have defective eyesight or else are totally blind? They are kept in

dark stables and then brought out to endure the sunlight reflected from snow, or the dust of long stretches of dry roads. The eye is a very sensitive organ, and no animal, man not excepted, has a more sensitive eye than the horse. It soon adapts itself to surrounding conditions and if the horse is kept in a dark apartment, the eye will soon be in no condition to stand the rough usage of work in the sunlight or dust. More than this, existing in the dark affects the general health of the body injuriously. Plants grow pale and soon cease to grow when kept in dark, but they regain their freshness and vigor when brought into the sunlight. Human beings dwelling in dark houses are pale and sickly; those whose occupations bring them much into the sun and whose houses are well lighted are rosy and healthy. It is the same with the lower animals. If confined in darkened quarters their health suffers. The stable for horses must be made tight that it may be warm; but that is no reason why it should be as dark as a dungeon. Instead of closing the windows with boards through which no light can enter let a few panes of glass be put in the openings. They will cost but very little and will not only admit the light of the sun but its warmth also. I am surprised that so few stables contain glass windows. Not to have them is the very opposite of being economical.

But in the effort to make horse stables tight ventilation is forgotten. There must be no cracks and holes to admit cold draughts, it is true. But there should be ample opportunities for foul air to escape and pure to enter. When confined, the air of stables soon becomes foul. It circulates over manure, solid and liquid, and the lungs and pores of the animals are continually throwing off effluvia to contaminate it. Breathing this foul air is as unwholesome for horses as for man. The way to provide for its escape and for its replacing by pure air is to have lattice work cupolas on the roof. This foul air is always heated air, and being heated air it is lighter and will rise and pass out above while the colder, purer and heavier air will rush in and take its place. In conclusion, the horse stable should be warm, light and ventilated; a tight apartment with glass in the windows and lattice-work cupolas on the roof.

The food of the horse requires just as much attention at this time as at any other season. In summer he is rightly fed large quantities of grain because his labors are arduous. The expenditure of much muscular force calls for this highly nutritious food and vigorous bodily exercise insures its digestion. But when, as in winter, the horse is idle more often than at work his food should consist of clover rather than grain. He will fatten and grow strong on it just as well, and when spring and hard work come he will have a vigorous appetite for grain. He will eat it with a relish while if fed grain largely during the winter he will lack appetite for it when he should eat the most of it.

I believe that a horse should be watered just as often and carefully in winter as in summer. Intense cold produces as great a thirst as heat. It does not require so much water to quench it, but the feeling of discomfort is as great. I am certain that many of my readers have noticed that of a frosty morning they feel thirsty every few minutes, though it requires but very little liquid to allay that thirst. It is so with the horse. There can be no greater cruelty than to compel him to lick the snow, which only aggravates his thirst, and yet I know of quite a number of farmers who are guilty of this very thing. Horses should be watered at least three times per day, in winter as well as in summer.

### Pasture For Pigs.

The importance of pasture in raising hogs is not as generally recognized in Kansas as it ought to be. Good, fresh pasture will not only sustain life in hogs, but it will stimulate them to good, healthy and rapid growth. Our experience is that clover is the best grass for hog pasture, all things considered. Orchard grass is good, and it may be that in Kansas, that and alfalfa may yet supersede clover even for hogs. Our Kansas farmers ought to get as much of their ground as they can spare well set in these grasses and test their relative merits. We ought to raise more tame grass. They are essential in all good farming. Mr. D. F. Curtis, in Ohio Farmer, says some good things on this subject. Many farmers do not appreciate the value of a clover pasture for pigs, he says. The hog is an omnivorous animal and takes to clover or even green grass, in the absence of other food, as freely as a cow or horse. I have fattened a grown hog for slaughter on sweet corn-stalks alone, fed green. Sorghum is still better, but not available for so long a feeding season. My system of wintering and summering swine, which has the commendation of being successful, is to feed apples, roots, bran and corn in winter with the house slops; and in the early spring to turn them into the orchard which is seeded with orchard grass. This grass furnishes the earliest bite of any, and it is very much relished by the swine; and besides, when once seeded it will last for a number of years. Following the orchard grass, the clover comes next in order. The orchard grass, on good land, will renew itself every two weeks for a fresh bite, and is admirably adapted for a separate feeding range for young pigs, while the older ones are confined to the clover fields. By the time the clover is used up, the sweet-stalks and sorghum will be sufficiently matured for cutting up and feeding in their order. When frost comes and destroys the succulence of these, the root field should be ready to turn into and let the hogs help themselves. Corn and other grains may be fed conjointly with the succulent food we have spoken of and it will be found that a little goes a great way in promoting a healthy and profitable growth. A field of peas to turn into will also furnish excellent feed at little cost. Barley is the best grain, ground entire, to make milk for mothers when suckling young. It is evident that under the pasturage system more hogs can be kept with the same amount of corn, and that one field will suffice for growing the entire amount of green feed, the size being proportionate to the demand. It would be a wise forethought in a man who proposed to rear hogs to plant an orchard of early maturing variety of sweet apples for his hogs to feed upon in the orchard, which should be made a permanent pig pasture. What a natural and sensible combination this would be—the apples producing growth for the pigs, and the pigs in their turn making more growth of apples—an equilibrium of profitable forces without any extra labor. My experience teaches me also that there is no more effectual method of enriching land and preparing it for good crops afterward than by rearing swine. Hogs possess a value as auxiliaries on the farm to increase its richness and to afford a profitable home market, which is not valued so highly as it might be. As generally managed hogs do not increase the fertilizers of the farm as much as they would if they were allowed to become more active factors. When shut up in a pen, as usually cared for, a pig adds comparatively little to the manure pile.

Pigs allowed to range and feed in the pure air, with cleanly surroundings, will

have pure blood, which in the course of nature will build up healthful bodies. They also have the opportunity to resort to remedies and antidotes, which their instincts may prescribe for their bodily ailments. These out-of-door-pigs would not show so well at the fairs, and would probably be passed over by the judges and people, who have been taught to admire only the fat, feverish, helpless thing which gets the prizes, but are really a caricature on fathers and mothers. Such pigs are best adapted to fill lard tubs, and to make doctor's bills; whereas, the standard of perfection should be a pig which will make the most ham with the least waste of fat, the longest and deepest sides, with the most lean meat. It should have bone enough to allow it to stand up and help itself, and carry with it the evidence of health and natural development in all parts. Pigs which run in a range, or pasture, have good appetites; the fresh air, exercise and change of diet gives them this; hence, they will eat a great variety of food, and much coarser than when confined in pens. Nothing need go to waste on a farm where pigs are kept, for lack of a market.

### How to Keep Cider Sweet.

Pure sweet cider that is arrested in the process of fermentation before it becomes acetic acid, or even alcohol, and with the carbonic acid gas worked out, is one of the most delightful beverages. When the saccharine matters, by fermentation, are being converted to alcohol, if a bent tube be inserted air tight into the bung, with the other end into a pail of water, to allow the carbonic acid gas evolved to pass off without admitting any air into the barrel, a beverage will be obtained that is fit nectar for the gods.

A handy way is to fill your cask nearly up to the wooden faucet when the cask is rolled so the bung is down. Get a common rubber tube and slip it over the end of the plug in the faucet, with the other end in the pail. Then turn the plug so the cider can have communication with the pail. After the water ceases to bubble, bottle or store away.

### The Marvellous Singing Doll.

This charming novelty is advertised in this issue by Massachusetts Organ Co., 57 Washington street, Boston, Mass., and certainly nothing will appeal more quickly to the children than a Doll that will sing a song. The price is very reasonable, the Doll is a beautiful affair, and the ingenious singing attachment will delight the young and amuse the old. The little girl who finds a Weber Doll "in her stocking" at Christmas time will be the envy of all.

Dear Sir: The beautiful Singing Doll came safely, and far exceed my expectation of what a Singing Doll could be. Our little folk were charmed with its beauty, but when it sang, their delight was unbounded. It will be to them a thing of beauty and a constant joy.  
Sincerely yours, REV. J. B. ABBOT.  
Medford, Mass., Aug. 13, 1883.

Good mental training in youth is of vast importance in after life to the man who works every day with his hands. A mechanic, skilled in his trade, who can also write good letters, keep accurate accounts and attend to his own contracts, has greatly the advantage over him who does not possess these latter qualifications.

### Consumption Cured.

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

At a recent sale of Short horn cattle in England, the prices realized were very low, on account of the fact that the foot and mouth disease was prevalent in the vicinity of the sale. The average price was 1270.

Simple's Scotch Sheep Dip is a valuable dressing for animals when suffering from sores or wounds. Circulars with prices, sent by D. Holmes, Druggist, Topeka.

White specks in butter are caused by curd which forms in the surplus milk taken off with the cream, and are really cheese instead of butter.

## In the Dairy.

### The Dairyman's Ten Commandments.

The following, by Mr. T. D. Curtis, was read not long since before the Central New York Farmer's Club:

I have been repeatedly urged to draw up a set of rules for the observation of the patrons of cheese factories. I have preferred, like Moses, to give my inspiration in the form of a decalogue, without the observance of which, no patron need hope to make the land flow with milk and money.

1. Thou shalt not abuse or worry thy cow—thou, nor thy maid-servant, nor thy man-servant, nor thy dog, nor the boy whose business it is to "drive up" the cows—but thou shalt at all times treat thy cow gently and kindly, securing her confidence, and allowing no one to molest her or make her afraid.

2. Thou shalt not starve or stint thy cow for food, nor give her poor, innutritious or unwholesome food of any kind whatsoever, but an abundance of that which is palatable and good for her system, that she may keep in good flesh, have a smooth coat and a clear eye; and thou shalt give her salt to lick whenever she liketh.

3. Thou shalt in no way deprive, nor allow thy cow to be deprived of plenty of clean water to drink, nor compel her to wallow in mud, nor to go a long distance to get water, nor to drink out of mud holes, stagnant ponds or pools, nor to sip water from holes in the earth made by her own feet, or the feet of other animals; but thou shalt give her an abundance of spring, brook or well water, kept clean enough for thine own use.

4. Thou shalt give thy cow ample shade in summer, and a warm shelter in winter; and the latter shall be kept clean and sweet, and be withal well ventilated; and thy cow shall have freedom of motion, a clean bed to lie upon, and an opportunity for such out-door exercise as she may desire, to the end that her blood shall freely circulate; that her muscles shall not deteriorate and become weak and stiffened, and that her digestion and appetite shall remain good.

5. Thou shalt milk thy cow in a cool place in summer, and when she is not heated or fretted, but standeth quiet and cheweth her cud, and in a clean place at all times; thou shalt clean thy cow's bag, milk her gently, and avoid getting filth into thy milk pail; and thou shalt not save for thine own or thy neighbor's use, or carry to the factory any milk drawn from a cow with a calf less than four days old, nor milk drawn from a cow suffering from horn and hoof disease, or horn distemper, or fever, or garget, or any other disease, nor from any cow thou hast good reason to believe is suffering from ill-health.

6. Thou shalt keep everything about thy stable and dairy house scrupulously clean; thou shalt thoroughly cleanse and scald—not merely rinse in hot water—all the pails, cans, strainers, pans, and other utensils used in milking, carrying milk, setting milk, or manufacturing it into any of the products of the dairy; and thou shalt carefully keep thy milk from exposure to a foul tainted or diseased atmosphere; so shalt thou prevent the oily particles in thy milk from absorbing bad odors, and fever malaria, and the virus of contagious diseases; and thou shalt spare thyself the sin and shame of delivering milk that "tasteth of the barn-yard," and of introducing disease into the families of those who eat of the products of the dairy.

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8. Thou shalt not water thy milk by mixing with it the contents of the spring, the well, the cistern, the brook, the watering-trough, or any other source of water supply; nor by feeding thy cow with villainous slops, whey, or extremely succulent food, whereby the contents of the milk-can shall be increased in quantity at the expense of quality, with a view of cheating thy neighbor; for thou wilt thereby be cheating thine own soul, and stand in constant danger of the penalty of the law.

9. Thou shalt not skim thy milk by taking off the cream that riseth in the can over night, that thou mayest have a little cream for coffee; nor by setting it in pans or other utensils over night; nor by saving strippings, nor by any other process; for if thine own sense of honesty does not restrain thee, thou shouldst constantly have the fear of the law and of the watchful eyes of thy neighbor before thee. It is better to save out a small mess of milk for thine own use.

10. Thou shalt not commit adultery by adulterating thy milk with burnt sugar, chalk, soda, salt, or any ingredient or compound whatsoever; nor by giving vile stuffs to thy cow; nor by any means, trick, device, or process known or unknown to the naturally depraved. The laws of the State, the health of the community, and the lives of the people, especially of the host of little ones, who are likened unto the kingdom of heaven, cry out against this unpardonable sin.

Under the new dispensation I add the eleventh commandment:

11. Thou shalt love thy neighbor as thyself and keep thy Sunday's milk at home for the purpose of making sweet butter for the use of thy family, and that the cheese-maker and all those who labor with him in the factory may rest, and worship according to the dictates of their conscience, on every Sunday. Thereby shalt thou meet the requirements of the Scriptures, and of the Constitution of the United States, and prolong the lives and improve the morals of a large and increasing class of useful citizens.

By faithfully observing these commandments, the dairyman shall keep a clear conscience, avoid annoying and expensive prosecution, retain the respect of his neighbors, secure a competency of this world's goods, live a peaceful life, and in his old age approach the bed of death "like one who wraps the drapery of his couch about him, and lies down to peaceful dreams."

### Youthful Vigor

Is restored by Leis' Dandelion Tonic when everything else fails. It contains all the elements necessary to repair nervous waste.

N. ALLAN THROOP, Englewood, Ill., Live Stock Artist and Engraver. Will sketch from life or photograph. Terms reasonable and work guaranteed.

C. J. E. BRUCE, Peabody, Kansas, Live Stock Auctioneer. Special attention given to stock sales in Kansas. Satisfaction guaranteed.

S. A. SAWYER, Manhattan, Kansas, Live Stock Auctioneer. Sales made anywhere in the West. Good references. Have full sets of A. H. B.

would be a violation of the law and commandments—but by bringing the milk in contact with a cool surface above the freezing point, and exposing thy milk in thin sheets to a clean atmosphere, that it may become charged with oxygen, which hath a wonderful virtue to prevent souring and tainting. It is shrewdly suspected by some of the prophets, that airing milk is of more value than cooling it, and experience sheweth that stirring with a dipper hath a preservative effect that should commend it to every patron of a cheese factory. Thou shalt confine thy milk in a covered can as short a time as possible, and protect it from the rays of the sun and the hot atmosphere. A woolen blanket thrown over the can and a canvass stretched over the milk-wagon would be found quite efficacious—the blanket is not to be used unless the milk is cooled.

8. Thou shalt not water thy milk by mixing with it the contents of the spring, the well, the cistern, the brook, the watering-trough, or any other source of water supply; nor by feeding thy cow with villainous slops, whey, or extremely succulent food, whereby the contents of the milk-can shall be increased in quantity at the expense of quality, with a view of cheating thy neighbor; for thou wilt thereby be cheating thine own soul, and stand in constant danger of the penalty of the law.

9. Thou shalt not skim thy milk by taking off the cream that riseth in the can over night, that thou mayest have a little cream for coffee; nor by setting it in pans or other utensils over night; nor by saving strippings, nor by any other process; for if thine own sense of honesty does not restrain thee, thou shouldst constantly have the fear of the law and of the watchful eyes of thy neighbor before thee. It is better to save out a small mess of milk for thine own use.

Under the new dispensation I add the eleventh commandment:

11. Thou shalt love thy neighbor as thyself and keep thy Sunday's milk at home for the purpose of making sweet butter for the use of thy family, and that the cheese-maker and all those who labor with him in the factory may rest, and worship according to the dictates of their conscience, on every Sunday. Thereby shalt thou meet the requirements of the Scriptures, and of the Constitution of the United States, and prolong the lives and improve the morals of a large and increasing class of useful citizens.

By faithfully observing these commandments, the dairyman shall keep a clear conscience, avoid annoying and expensive prosecution, retain the respect of his neighbors, secure a competency of this world's goods, live a peaceful life, and in his old age approach the bed of death "like one who wraps the drapery of his couch about him, and lies down to peaceful dreams."

## BREEDERS' DIRECTORY.

Cards of three lines or less, will be inserted in the Breeder's Directory for \$10.00 per year, or \$5.00 for six months; each additional line, \$2.00 per year. A copy of the paper will be sent the advertiser during the continuance of the card.

### HORSES.

JOHN CARSON, Winchester, Kansas, Importer and Breeder of Clydesdale and Norman Horses. Inspection and correspondence invited.

### CATTLE.

GEO. T. BORLAND, Iowa City, Iowa, Breeder of Short-horn Cattle. Car load lots of Thoroughbred or Gr. de a special. Send for catalogue and prices of good individuals with good pedigrees.

J. W. LILLARD, Nevada, Mo., Breeder of THOROUGHbred SHORT HORNS. A Young Mary bull at head of herd. Young stock for sale. Satisfaction guaranteed.

WM. P. HIGINBOTHAM, Manhattan, Riley Co., Kansas, Proprietor of the Blue Valley Herd of Recorded Short-horn Cattle of the best families and choice colors. Also High Grade Cattle. Offers some choice bargains in Bulls, Cows and Heifers. The growing of grade bulls for the Southern and Western trade a specialty. Correspondence and a call at the Blue Valley Bank is respectfully solicited.

PLEASANT VIEW FARM, Wm. Brown Lawrence, Kansas, Breeder of JERSEY CATTLE of the best strains.

PLUMWOOD STOCK FARM, Wakarusa, Kansas, T. M. Murry & Son, Breeders of SHORT HORNS. Young stock for sale. Correspondence or inspection invited.

J. P. HALL, Emporia, Kansas, BREEDER OF HOLSTEIN CATTLE.

D. R. PATTON, Hamlin, Brown Co., Kas., breeder of Broad-browed Short-horn cattle, representing twelve popular families. Young stock for sale.

OAK WOOD HERD, C. S. Eichholz, Wichita, Kas., Live Stock Auctioneer and breeder of Thoroughbred Short-horn Cattle.

ALPHAM HERD, W. H. H. Cundiff, Pleasant Hill, Mo., Fashionable-bred Short-horn cattle. Straight Rose of Sharon bull at head of herd. Young cattle for sale; bulls suitable to head any show herd.

A. HAMILTON, Butler, Mo., Thoroughbred Galloway cattle, and calves out of Short-horn cows by Galloway bulls, for sale.

H. H. LACKEY, Peabody, Kansas, breeder of Short-horn cattle. Herd numbers 100 head of breeding cows. Choice stock for sale cheap. Good milking families. Invites correspondence and inspection of herd. Satisfaction guaranteed.

PICKETT & HENSHAW, Plattsburg, Mo., breeders of the Oxfords, Princess, Renick, Rose of Sharon, Wiley, Young Mary, Phyllis, and other popular strains of Short horns. Stock for sale. Plattsburg is near Leavenworth.

### Hereford Cattle.

W. C. MCGAVOCK, Franklin, Howard Co., Mo., Breeder of Thoroughbred and High grade Hereford and Short-horn cattle. 100 head of High-grade Short-horn Heifers for sale.

WALTER MORGAN & SON, Breeders of HEREFORD CATTLE. Living, Marshall County, Kansas.

F. W. SMITH, Woodlandville, Mo., Breeder of Thoroughbred Hereford Cattle. Dictator 1989 heads the herd. 50 Grade Bulls for sale.

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### CATTLE AND SWINE.

JOS. E. MILLER, Breeder of Holstein Cattle Shropshire Sheep and Yorkshire Swine. Ellwood Stock Farms, Belleville, Ill.

GUILD & PRATT, Capital View Stock Farm, Silver Lake, Kansas, Breeders of THOROUGHbred SHORT-HORN CATTLE and POLAND-CHINA SWINE. Correspondence solicited.

HIRAM WARD, Burlingame, Kansas, owner of School Creek Herd of Short-horn cattle and Berkshire hogs. My breeding stock have been carefully selected. They are good individuals as well as of good families. A few choice bull calves for sale, and good pigs now ready for delivery.

DR. A. M. EIDSON, Reading, Lyon Co., Kas., makes a specialty of the breeding and sale of thoroughbred and high-grade Short-horn Cattle, Hambletonian Horses of the most fashionable strain, pure-bred Jersey Red Hogs and Jersey Cattle.

H. B. SCOTT, Sedalia, Mo., breeder of SHORT-HORN CATTLE, POLAND CHINA HOGS, Cotswold and SHROPSHIRE SHEEP. Send for catalogue.

W. H. & T. C. EVANS, Sedalia, Mo., Breeders of Short-horn Cattle, Berkshire Hogs, Bronze Turkeys, Plymouth Rock Chickens and Pekin Ducks.

H. BLAKESLEY, Peabody, Kas., breeder of choice Short-horn Cattle and Poland-China Swine.

JERSEY PARK STOCK FARM, O. F. Searl, Solomon City, Kas., breeder of Herd Register Jersey Cattle and Berkshire Pigs. Stock for sale.

SMALL BROS., Hoyt, Jackson Co., Kansas, Breeders of Short-horn Cattle and Chester White Swine. Correspondence solicited.

WOODSIDE STOCK FARM, F. M. Neal, Pleasant Run, Pottawatomie Co., Kas., breeder of Thoroughbred and high-grade Short-horn cattle, Cotswold sheep, Poland-China and Berkshire hogs. Young stock for sale.

### SWINE.

ROBERT COOK, Iola, Allen county, Kansas, Importer and Breeder of Poland China Hogs. Pigs warranted first-class. Write.

C. W. JONES, Richland, Mich., breeder of pure-bred Poland-China. My breeding stock all recorded in both the Ohio and American P.-C. Records.

### SWINE.

PHIL D. MILLER & SONS, Pandora, Iowa, breeders of Poland-Chinas, Essex Big-boned English Berkshires and Duroc or Red Berkshires. Our herd are noted as prize-winners. We also have fine Cotswold and Southdown Rams for sale, and the best breeds of poultry for the farm.

J. W. ARNOLD, Louisville, Kansas, Breeder of Registered Poland-China Swine. Young stock for sale. Stock in O. P.-C. R.

DANKIN BALDRIDGE, Parsons, Kansas, Breeder of Thoroughbred POLAND-CHINA SWINE. Stock for sale. Satisfaction guaranteed.

N. H. GENTRY, Sedalia, Mo., Breeder of BERKSHIRE HOGS of large size and best quality.

A. J. CARPENTER, Milford, Kansas, Breeder of Thoroughbred Poland-China Swine. Stock for sale. Inspection and correspondence invited.

L. W. ASHBY, Calhoun, Mo., Breeder of BERKSHIRE SWINE of largest size and choicest strains.

ROBERT COOK, Iola, Allen county, Kansas, Importer and Breeder of Poland China Hogs. Pigs warranted first-class. Write.

C. O. BLANKENBAKER, OTTAWA, KAS., breeder and shipper of recorded POLAND CHINAS and Yorkshire swine. Also Plymouth Rocks. Special rates by express. Write.

### SHEEP.

#### H. V. PUGSLEY.

PLATTSBURG, Mo., breeder of Vermont registered Merino Sheep. Inspection of flocks and correspondence invited. Stubby 440 heads the flock. One hundred and fifty rams for sale.

E. COPELAND & SON, Douglas, Kansas, breeder of Spanish or improved American Merino Sheep; noted for size, hardhood and heavy fleece. Average weight of fleece for the flock of 594 is 18 lbs. 7 ounces. 200 Ewes and 60 Rams for sale.

R. W. GENTRY, Sedalia, Mo., Breeder of Registered Merino Sheep of largest size and best quality, at prices as low as the lowest.

HARRY McCULLOUGH, Fayette, Howard Co., Missouri, breeder of MERINO SHEEP, Berkshire Hogs, and high-class Poultry. 400 Rams for sale on reasonable terms.

E. T. FROWE, Pavilion, Kansas, Breeds and has for sale SPANISH MERINO SHEEP. Inspection and correspondence invited.

J. B. KEENEY, Tipton, Lenawee Co., Michigan, has choice Michigan Merino Ewes for sale. Correspondence invited.

MERINO PARK, D. W. McQuilly, Proprietor, breeder and importer of Spanish Merino Sheep, high class Poultry and Berkshire Hogs. Stock for sale; 150 bucks. Rocheport, Boone county, Mo.

BRUCE STONER, Lee's Summit, Mo., breeder of Merino Sheep. 200 full-blood ewes and 70 bucks for sale.

G. B. BOWWELL, Breckenridge, Mo., breeder of Spanish or improved American Merino sheep; noted for size, hardhood and heavy fleece; 400 rams for sale.

### POULTRY.

A. N. BAKER, Proprietor Lawn Field Poultry Yard, Sabetha, Kas., breeds Buff Cochins, White Leghorns, Partridge Cochins, Houdans, Plymouth Rocks, B. R. B. Game Bantams, and Pekin Ducks. Eggs \$2.00 for 13; \$3.50 for 25. Also Black and-tan dogs for sale.

HENRY DAVIS, Dyer, Indiana, breeder of Plymouth Rock and Light Brahma Poultry, Bronze Turkeys, Pekin Ducks, and Toulouse Geese a specialty. Prices reasonable.

SEND TWO DOLLARS to Mark S. Salisbury, box 931, Kansas City, Mo., and get a choice young Plymouth Rock Rooster. Three for \$5. Felch strain.

MY ENTIRE STOCK of Thoroughbred Poultry for sale cheap. Address F. E. Marsh, Manhattan, Kansas.

WAVELAND POULTRY YARDS, Waveland, Shawnee county, Kansas. W. J. McColm, breeder of Light Brahmans, Plymouth Rocks, and Pekin Ducks. Stock for sale now. Eggs for hatching in season; also Buff Cochins eggs.

JAC WEIDLEIN, Peabody, Kas., breeder and shipper of pure bred high class poultry of 15 varieties. Send for circulars and price list.

NEOSHO VALLEY POULTRY YARDS, Wm. Hammond, P. O. box 190, Emporia, Kas., breeder of pure bred Light Brahmans, Partridge Cochins, Plymouth Rocks. Eggs in season; stock in fall. Send for circular.

### THE LINWOOD HERD

## SHORT-HORN CATTLE



IMP. BARON VICTOR

W. A. HARRIS, Lawrence, Kansas.

The herd is composed of VICTORIAS, VIOLETS, LAVENDERS, BRAWNIE BUDS, SEBETTS, and others from the celebrated herd of A. Cruickshank, Sittlyon, Aberdeenshire, Scotland. GOLDEN DROPS, and URY, descended from the renowned herd of S. Campbell Kinellar, Aberdeenshire, Scotland. Also YOUNG MARYS, YOUNG PHYLLES, LADY ELIZABETHS, etc. Imp. Baron Victor 4224, bred by Cruickshank, an Golden Drop's HILLHURST 39130 head the herd. 27 Linwood, Leavenworth Co., Kas. is on the U. P. R. R. 27 miles west of Kansas City. Pure-bred joints station. Catalogues on application. Inspection invited.

STRONG CITY STOCK SALES will be held the fourth Saturday in each month at Strong City. Address G. O. HILDEBRAND, secretary.

## Correspondence.

### From Marshall County.

*Kansas Farmer:*

As usual Marshall county is blessed with good crops. Corn is making a good average yield of a fair quality. The market price for new corn is 23 cents, which certainly is a fair price considering the present prices of other farm products. Stock of all kind is doing well. Corn picking is very backward, probably two-thirds of the crop still in the field. Lands have advanced in this county during the past two years fully 75 per cent. The county is constantly receiving a good class of settlers of substantial means. The Republican party has shouldered the prohibition question and the saloons in the county within the past two weeks have been reduced from 30 to one or two. Friends of prohibition are sanguine that it has come to stay. The time has come when men must array themselves either upon the side of law and order or with the bumper element of society. Point out a man that favors nullification of the prohibitory law and you point out a man that disregards any law sacred or profane.

J. M.

Wells, Kansas, Nov. 25.

### Sorghum For Feed.

*Kansas Farmer:*

After reading Mr. Mohler's article in the FARMER of Nov. 7, I concluded that I would give you the results of my experiment in raising sorghum for fodder. I plowed the ground deep and harrowed once and then took my wheat drill and set it to sow one and one-half bushels to the acre, just as I would have done for wheat; got it in about the 25th of May; cut it the 10th of September and let it lie on the gavel to cure, 3 or 4 days are enough but I was compelled to let it lie longer for the want of help to stack it. It is not necessary to stack but can be shocked up and hauled in through winter as it is wanted. This next season I propose to put it in about the 1st of May or earlier if the weather will permit and then cutting it about the 1st of July and removing and cutting a second time the last of September. I think in this way I can cut it with a self-binder. I cut this year's crop with a Woods' mower; it grew too rank to handle in any other way.

As to its value as a food I cannot say what its full value is, but this I do know, that at this writing everything eats it readily, horses, cows and hogs.

R. F. RUSSELL.

Galva, Nov. 26, 1883.

### Timothy and Clover Mixed.

*Kansas Farmer:*

Believing that farmers can be of much service to each other by an exchange of experience through the medium of the press, I send you my method of sowing timothy, or timothy and clover mixed. I have never failed in securing an excellent stand here in Missouri.

I sow timothy and clover mixed (four-fifths timothy and one-fifth clover) at the rate of one bushel of the mixture to three acres of land, or even two acres. I sow in March or April. My favorite ground is a corn field, raking the stalks and burning. I then plow crossways of the last plowing with cultivator, as this levels the ground; or what is better, in cultivating the corn do not ridge it, which will leave your ground comparatively smooth for sowing to grass. After scratching up the land with cultivator, sow the seed; then level the land with light one-horse drag.

I have found that a field rather foul keeps the ground more moist than a very clean field. After the timothy gets ripe the field can be mown and raked, in order to have it clean of old weeds next year. A better plan is to let it stand until spring, until the ground is very loose, drag the weeds down and rake with a wooden tooth-rake, and haul the trash off the land. I will warrant a stand of grass sown this way—four times out of five, if not every time.

Farmers fail to get sets of timothy and clover by fresh breaking land with breaking plows, getting too much loose earth, by covering seed too deeply with heavy harrows, by attempting to get a set in wheat, flax, or oats, and by being too sparing of seed. Many have been discouraged by repeated failures; try again and follow closely the

above directions and I will warrant you a stand the first season, that will make nice fall grazing for young stock and have a root almost as good as old meadow, at any rate with a hold so strong that stock in grazing will not pull it up, nor will it freeze out. Many people raise meadows by grazing the first season, not being aware of the fact that small timothy is so easily pulled up by the roots, or by tramping with heavy cattle. Sheep will ruin a young meadow. Calves or yearlings to graze lightly are the most suitable stock.

To elicit experience from others or opinion, will say that after mature reflection as to blue-grass, red-top, red clover, I intend experimenting on a 360 acre pasture of prairie grass, now pretty well eaten out, by sowing in the spring with white clover, to keep it up to a permanent grazing pasture. Can any one suggest a better grass or give me their experience with white clover in this manner?

A. HAMILTON.

Butler, Mo.

### Encouraging from Chautauqua County.

*Kansas Farmer:*

This has been the best general crop year that we have ever enjoyed in the history of Chautauqua county. Corn-gathering is progressing finely, and we never have had as good a crop in this part of the State. The average is higher than ever before. There is not fat stock enough feeding this winter to consume much over one-half of the crop. Stock of all kinds is doing well.

We are satisfied with the FARMER and do not wish to dictate to our worthy editor; only want to help him make the FARMER the best family paper of the kind in the West. Speak out, Bro. Pepper; keep abreast of the times.

D. C. B.

Hart's Mills, Nov. 27.

### Don't.

Don't go to bed with cold feet. Don't sleep in the same undergarments that are worn during the day. Don't sleep in a room that is not well ventilated. Don't sit or sleep in a draught. Don't lie on the left side too much. Don't lie on the back, to keep from snoring. Don't try to get along with less than seven or eight hours' sleep out of the twenty-four. Don't jump out of bed immediately on awaking in the morning. Don't forget to rub yourself well all over with crash towel or hands before dressing. Don't forget to take a good drink of pure water before breakfast. Don't take long walks when the stomach is entirely empty. Don't start to do a day's work without eating a good breakfast. Don't eat anything but well-cooked and nutritious foods. Don't eat what you don't want, just to save it. Don't eat between meals, nor enough to cause uneasiness at meal time. Don't eat the smallest morsel unless hungry, if well. Don't try to keep up on coffee or alcoholic stimulants, when nature is calling you to sleep. Don't stand over hot-air registers. Don't inhale hot air, or fumes of any acids. Don't fill the gash with soot, sugar, or anything else to arrest the hemorrhage when you cut yourself, but bring the parts together with strips of adhesive plaster. Don't wear thin hose or light-soled shoes in cold or wet weather. Don't strain your eyes by reading on an empty stomach, or when ill. Don't strain your eyes by reading or sewing at dusk, by a dim light, or flickering candle, or when very tired. Don't sing or hallo when your throat is sore, or you are hoarse. Don't drink ice-water when you are very warm, and never a glassful at a time, but simply sip it slowly. Don't take some other person's medicine because you are similarly afflicted. Don't bathe in less than two hours after eating. Don't eat in less than two hours after bathing. Don't call so frequently on your sick friend as to make your company and conversation a bore.

### Ahead of All Others.

The superiority of Wells, Richardson & Co.'s Improved Butter Color over all others made, is again demonstrated by its record at the Autumnal Fairs. The test of practical use is what tells the story, and the great value of the premiums given by the Agricultural Fairs lies in the fact, that the judges in these cases are regular farmers, who know what their needs are and what will supply them. Wells, Richardson & Co.'s Improved Butter Color, which has taken first premium at all fairs where exhibited, is put up in a vegetable oil so prepared that it cannot become rancid, a most important property, the lack of which is fatal to so many of the Butter-Colors offered for sale. It does not color the butter milk; it imparts a bright natural color, which is unattainable by many others; and being the strongest is the cheapest Color in the market.

### About Surface Cultivation.

It is still unsettled whether stirring the surface soil aids in either collecting or retaining moisture, and if it does, whether it is better done shallow or deep. All of us have seen corn "laid by" in ridges six to ten inches higher than the bottoms of the "middle-dies." That is deep cultivation, and from the fact that some farmers continue the practice, it is not unreasonable to believe that they regard it better than that which "merely scratches" the surface. The "listing" method which is adopted in some sections is based on the theory that ridging corn rows is not good. After fertility moisture is most important, and it is in relation to moisture alone that the subject of stirring the soil in a dry time has any interest. With fertile soil and abundance of rain and heat, there is no doubting growth of vegetation.

Deep stirring is advocated by persons who believe that loosening the soil and working it renders it more susceptible to atmospheric influence, and better prepares it for retaining the moisture it absorbs from the air. If that theory is true, there is no difficulty in understanding why the stirring ought to be deep. If loose earth really attracts or absorbs moisture from the atmosphere, then the more loose earth the better, and that means deep working. But if the absorbing theory is not good, it follows that if deep stirring is proper it must be because of some other fact. If any one will, on a warm day, take a shovel and throw some earth—say a bushel, up into the air, a little at a time so that all of the particles shall be operated upon by the atmosphere, letting the earth drop back on a light dry cement or stone floor, and continue the same process with the same bushel of earth, he will soon discover that instead of collecting moisture, the earth will soon become so dry as to be movable by very light winds. If a pile of damp earth be laid upon a dry floor and stirred it will soon be dried into dust. Take any parcel of soil, separate it from the rest of earth by placing it on a floor of wood or stone or iron—any dry and hard substance except earth, and stir it in warm weather, or even in cold weather if dry, and it will dry out sooner or later according to the frequency and persistence of the stirring. Then, to test it in another way,—take a parcel of dry earth—dust, place it on a dry, hard floor, and so long as drouth continues, that dust will remain as dry as it was when put there.

This manner of experimenting would seem to establish beyond controversy that earth, soft or hard, in warm and dry weather, does not absorb from the air any perceptible amount of moisture.

It is an established fact, however, that earth which is stirred frequently—as, for instance, corn ground, is, at the end of a given period, more moist than that which is not stirred, and the growth of the corn on it better and more vigorous. This may not apply to very sandy soil, or any other that retains a perfectly loose surface in the driest weather. But very generally the rule applies, that from some cause or other, stirring does good. Another fact may be admitted: That in order to get the most good from stirring soil in dry weather, it must be done shallow. If any person is curious to test this, let him work a piece of ground in a hot, dry time, work it deep and often. He will soon discover that what moisture was in the soil has nearly all evaporated. To test it on a smaller scale though fully as well, let him slip a piece of sheet-iron under the surface, say, four inches down, then, with four four-inch strips of the same material set perpendicularly down on the bottom piece, making a box, take a fire-shovel or a table spoon and begin to stir the earth in the iron box. It will soon be perfectly dry. But, even with the box to separate this particular lot of soil from the rest in the field, if the experimenter will but stir the surface with some small instrument, as a rake made by driving two or three four-penny nails through an inch piece of wood, and do this once a day, he will find that the earth below the reach of his implement will remain much more nearly in the condition it was when the experiment began.

In all these cases, however, it matters not what method is adopted, one universal fact invariably exists—viz.: That in the time of drouth, in warm weather the soil continues to grow drier all the time. Different methods of tillage show different degrees of this dryness at any particular time, and that is

the most that can be said about it in truth.

Then we must account for the advantages resulting from frequent and shallow stirring upon some other theory than that which alleges that soil absorbs moisture from the air. Evaporation from a solid surface implies a system of pores, tubes or other means of conduit from interior reservoirs of water. There could be no evaporation of water from the surface of the earth if there was no water under the surface; and the water could not get to and out of the surface if there were not some passages or means of outlet. It is just like an animal body which is perpetually exuding water through the pores of the skin. This evaporation from the earth is greatest during hottest and driest weather; and, as we have already stated, it continues no matter what method of tillage is adopted. All of us have seen the numberless little cracks in the surface of soft ground occurring soon after it was worked in hot weather. These cracks are so many earth-chimneys conveying outward the moisture from within; and upon the same principle that shutting up the mouth of a house chimney will keep the smoke in the lower part of the house, so may we retard evaporation from the earth's surface by closing up these little chimneys which let the moisture out. Now, that is precisely what we do when we stir the top of the soil. We close the cracks, we mix up the soil, we interrupt the evaporating process—choke up the outlets, and this helps to retain the moisture already in the soil. That, it appears to us, is the true philosophy of surface tillage in dry weather. In all possible ways obstruct and retard evaporation.

### The Evolution of the Banjo.

"It is astonishing how fashionable the banjo has become of late years," said an eminent instructor in the mysteries of that instrument the other day. The "Professor" was seated in an easy chair, with a banjo resting across his knees, while his hand, wandering over his strings, produced dreamy suggestions of a plantation melody.

"Once," he continued, "the banjo was considered a barbarous instrument, to be classed with the kettle-drum and the tom-tom, and was thought incapable of anything beyond an accompaniment. Now-a-days the development of musical taste has brought about an appreciation of the higher possibilities of the banjo, and has also produced a marked improvement in the instrument itself. The modern banjo, with its carefully stretched sheepskin, steel frame, and catgut strings, is a very different affair from the original instrument which one sees even now in the South in the hands of the negro, whose greatest delight it is to strum upon its accompaniments to those strange, barbarous chants, the primitive music brought from Africa, which were doubtless once the war songs and feast songs of the native tribes. The first banjo was doubtless a simple bamboo stick, with fibres stretched upon it, upon which the magicians, or Obi-men, in Africa may have played while conducting their enchantments. The next step in the evolution of a banjo was a calabash, a gourd-like fruit with a long stem, upon which the strings of the instrument were stretched. The present shape is probably directly traceable to this curious instrument. Even now, in the South, the darkeys make banjos out of gourds, across which they stretch some sort of skin for a diaphragm. Snake-skin is a favorite material for the purpose.

"There is no race of people more generally gifted with natural music ears than the African. It is a rare thing to see a negro in the South who cannot sing or play upon some musical instrument. I once lived upon a plantation for a few weeks, and every night the negro quarters were filled with the music of the banjo and the voices of the darkeys singing. There was one instrument I heard which puzzled me very much. It seemed to give forth but a single, long, droning note. It wasn't for some time that I knew what produced it, and you could never guess what it was. A negro would lay his horny fingers on the table, which served as a sounding board, and, wetting the fingers with his tongue, draw the stick slowly across it, producing the long bass note I have described. A year and a half ago the banjo furor was at its height. It even became fashionable in England, where proficiency in playing upon the instrument came to be considered an elegant accomplishment. It is still fashionable, though not quite so much so now as when it first became the rage. Many young ladies and gentlemen come to me to learn how to play the banjo. It is quite easy to learn and serves admirably to accompany singing in the parlor."

### What About the Surplus Revenues?

It is getting to be a pretty serious problem—what shall be done with and about the surplus revenue that is accumulating in the National Treasury at the rate of about one hundred million dollars a year more than is required for the ordinary expenses of the government. The national revenues are now derived from imports on foreign goods—tariff, and from taxes levied on tobacco and liquors. At the last session of Congress, in an effort to reduce the revenues by reducing taxation, Congress amended the International Revenue laws so as to remove taxes from medicines, matches, and bank checks, and reduce those on tobacco. In connection with this a slight reduction was made in tariff rates. It was estimated that the aggregate reduction would amount to about seventy million dollars annually. How this will prove to be it is too soon now to predict with safety. But if that estimate should be nearly correct, with the rapid reduction of the public debt and consequent decrease of interest, and the increase of revenue derived from an increased consumption of tobacco and spirits, in a few years the treasury will be too full, just as it is now. It is very bad policy for the nation to hoard money, and the people will not long suffer it to be done.

Statesmen and politicians are studying different methods of disposing of the surplus revenue. It seems strange that any of us should be thinking to remedy the matter by disposing of the surplus rather than by cutting down the taxes and thus shutting off supplies. Legitimate and regular expenses of government must be borne by the people; and it is wise to so arrange this burden as that it shall bear as lightly as possible on all tax-payers and not too heavily upon any. This is the golden thought to be kept in view in all efforts to reduce the public taxes.

But we do not desire at this time to discuss that subject. What is in our mind now is the suggestion contained in a letter recently written by Ex-Secretary Blaine. That distinguished gentleman proposes that instead of abolishing taxes on liquors, they be retained and the revenue received from that source be distributed among the different states in proportion to their population. The amount yielded by the tax on spirituous and malt liquors last year, Mr. Blaine says, was over \$86,000,000. This amount, or whatever it would be from year to year, it is proposed to give to the people of the several states to pay their taxes with. That amount (\$86,000,000) for the whole country, would be for Kansas \$1,743,000, or enough in one year to run our state government two years. Should Mr. Blaine's suggestion become law, our legislation would not only be relieved from levying any taxes on the people of the State, but they would have three-quarters of a million dollars surplus every year to dispose of. Nobody will be base enough to intimate that there would be any jobbery in distributing so large a sum of money, but it might be well enough to not tempt anybody. We are not able to state accurately from memory what is the amount of State taxation for all of the thirty-eight States; but we do not believe it will average a million dollars to the State. Putting it at a million, that would make the aggregate thirty-eight million. What, then, would be done with the rest of the eighty-six million? A surplus of forty-eight million dollars to be divided or in some manner disposed of by the State legislatures, would not be a good state of public affairs. It would be better to leave the whole amount in one place subject to the discussions and decisions of one body.

Mr. Blaine does not want the tax removed, because, he says so hurtful a thing as intoxicating liquors ought not to go free while farms must be taxed. This a humane view of the matter. We all know Mr. Blaine is a large-hearted, sober-minded man. He says the consumer pays the tax and it is no burden upon the people; that is, they do not feel it to be a burden as they do taxes levied on their property. Therefore he would remove taxes from land and pile them on whisky.

We have great respect for Mr. Blaine and for his opinions as well, for he is one of the ablest men in the country; but we do not like his idea of preparing a bay window in the national temple for whisky to receive the world's sunshine in. His proposition assumes that whisky is to be and continue one of us—to run with the land, as lawyers say about things that pass with title to real

estate or descend with the inheritance. We believe that if Mr. Blaine lives twenty years longer he will wonder why in 1883 he was not studying ways and means to get rid of whisky rather than how to dispose of taxes derived from it. That policy can never be adopted. The people of this country cannot be persuaded that the best thing to do with whisky is to get all the property holders of the country interested in escaping their just taxation while it is paid by money that ought to be used in legitimate trade. The government is now doing the thing that seems best for the time being; and it will be very unwise to change it except to narrow down instead of enlarge the working area of the still. It is going downward and backward to talk about embalming whisky and thus perpetuating its reign in these United States.

### About Making Ponds.

In a late issue of the Iowa Homestead, a correspondent thus writes about making ponds:

Pond-making is an art that but few understand, and as the subject of carp culture is exciting so much attention, a practical article on the subject might be of interest. Hundreds of ponds will be made in the spring, and if the makers do not profit by the experience of some one else their ponds will be a failure.

The first thing to be considered in making a pond is the drain or outlet. Make your drain-pipe of six-inch fencing lumber, and bury it in a ditch two or three feet deep under the base of your levee. Then, when you have scraped down to the upper end of the pipe your levee will be finished. Commence your levee broader than you think necessary, as they have a remarkable way of drawing in toward the top. If you want a levee ten feet high, commence it fifty feet wide. This will leave it ten feet wide at the top. Make your levee by the layer process, spreading each scraper or cart load out evenly.

The inside end of the drain-pipe must have both valve and strainer-box. The valve to stop the water, and the strainer-box to prevent the exit of fish when draining the pond. Cut the inside end of the drain-pipe at what carpenters call a mitre. Fix thereon by a suitable hinge a flop-valve of pine, so arranged as to fall off at its own gravity and fit snugly. Around the inside end of the pipe make a strainer-box by setting four posts and nailing on slats. Fasten a bail to the flop-valve, letting it extend up through the strainer-box. When you wish to drain your pond, reach down through the water with a pole, hook the bail and lift the valve.

A pond in which the water is allowed to run directly into and through is liable to break at the waster, and should this not happen it will soon fill up with mud. This can be remedied. Above where the water will back in the main pond, make a small levee of boards and dirt, having under it a drain-pipe and flop-valve similar to the one in the main pond. From one end of the small bank, dig a ditch around the main pond so that when it is full you can close the upper valve and allow the water to run away. Carp culture will be very profitable for the next few years, and any one who will make a business of it can clear large sums of money. My fish have grown from two to seventeen inches in length since April, and are as fat and broad on the back as suckling pigs.

### A Sleeping-Oar Episode.

Have you ever rode in a sleeping-car? If so, you have probably noticed some uneasy persons who are debating in their minds the all-important question, "how to go to bed?" Generally the debate results in "sitting up" till all the other passengers have retired. The following extract describes the actions

## A Proposition to the Wool Growers of Kansas.

1st—To erect a Warehouse with a capacity of 2,000,000 pounds of sack wool and Scouring Mill of 25,000 pounds capacity per diem.  
2d—The Wool to be graded and sorted into eight grades and fitted for manufacturers and spinners.  
3d—The Company agreeing to Grade, Sort, Scour, furnish full insurance (on wool) and Storage for four months, for 2 cents per pound, gross.  
4th—On receipt of wool the Company will issue Warehouse Receipt to the Shipper, negotiable at any Bank or money center. (Further details, see Circular No. 1.)  
5th—To insure the Wool Grower protection, the Company provides that the Wool Growers' Association may appoint an agent to represent them during the Clipping and Shipping Season. Also shippers from any section, not in the Association, can have the same privilege. (Further details, see Circular No. 1.)  
6th—Any Wool Grower, not a member of the Association, can supervise the scouring of his own wool by appointing a day; and if he desires, the Company will act as his selling agent, without extra charge.  
7th—In order to reduce Freights to a minimum, Wool should be shipped in Car-load Lots of not less than 10,000 pounds each. If from one shipper, will be sorted and scoured as one lot. (Further details, see Circular No. 1.)  
8th—Lots less than car lots, will be graded, scoured and sold in mass with other wools of like quality and shrinkage. (Further details, see Circular No. 1.)  
The Executive Committee of the Wool Growers' Association, having had this matter under advisement during the State Fair and since, do most heartily approve of this plan as the most practical solution of the problem of marketing the wool clip of Kansas.  
The Buell Manufacturing Company, of St. Joseph, commend this plan as practical, and in the interest of the Wool Grower, and purposes that if the project is successful, to give the Company an order for 600,000 pounds of scoured wool for the coming year. Other manufacturers have assured us of their patronage for the reason they can buy just the grades they require.  
The above proposition is submitted to the Wool Growers of Kansas for their consideration, to be discussed and acted upon at the annual meeting of the Association in January next. And upon the pledge (under contract in writing) of a sufficient number of individual growers guaranteeing 1,000,000 pounds of the clip of 1884, the Company will immediately carry out their part of the contract.  
The Growers not members of the Association are requested to send in their pledges to the subscriber, and for Circulars or further information address S. S. OTT, or the subscriber at TOPEKA.  
It is the opinion of all who have studied this matter in all its details, that it will increase the net income of the Wool Grower at least 5 cents per pound on unwashed wool, besides making a Home Market, Quick Returns, and overcoming many of the difficulties under which the wool grower now labors.  
Very truly yours,  
JOHN S. EMERY.

of a man of a different stripe from the average traveler:

Going down the great Jackson route from Grenada, Miss., a regular old home-spun native of the State entered the sleeping-car and paid for a berth. He had never been inside of a car of the kind, and everything astonished him. When the porter came to make up the beds I saw that the native was greatly perplexed, but as he made no direct appeal it wasn't my duty to post him. He was the first one to make preparations for bed. He glanced anxiously around, pulled off one boot, and then took a rest for five minutes. When the other boot came off he had solved the problem. Pushing his boots under the berth he started for the rear platform, and nothing was heard from him for about ten minutes. Then he put his head into the door and called out:

"All you 'uns in thar look out, for I'm comin'!"

And come he did. He had disrobed while standing on the platform, made a bundle of vest, coat and pants, and as he shot into bed after a run up the aisle, he gurgled out:

"Old Mississippi may be a little slow, but she allus gets thar, just the same."

### The Kansas State Grange.

The next annual meeting of the Kansas State Grange, P. of H., will be held at Manhattan, commencing at 9 o'clock a. m., December 11, 1883.

By order of Executive Committee.  
W. H. JONES, Chairman.

S. B. Prentiss M. D., a prominent physician of Lawrence, Kas., certifies that he has carefully observed the effects of Leis' Dandelion Tonic, and he regards it an excellent alternative tonic well adapted to the climate of Kansas and the West.

"Boy," said an ill-tempered old fellow to a noisy lad, "what are you hollerin' for when I am going by?" "Humph!" returned the boy, "what are you going by for when I am hollerin'?"

At Chicago the cigar manufacturers have decided to close their shops against members of the Cigar-maker' Union, No. 14, on account of the refusal of the latter to work with members of the Progressive Union.

### Mother Swan's Worm Syrup.

Infalible, tasteless, harmless, cathartic; for feverishness, restlessness, worms, constipation. 25c.

The late Isabella grapes hang on the vine the better they are in flavor, provided they are in a warm place.

### For Thick Heads.

Heavy stomachs, bilious conditions.—Wells' May Apple Pills—anti-bilious, cathartic. 10c. and 25c.

The Masonic Temple at Twenty-third street and Sixth Avenue, New York City was burned last Saturday.

### TOPEKA ADVERTISEMENTS.

## TO FARMERS.

We have now in stock this year's growth of Clover, Timothy, Red-Top, Orchard Grass, Kentucky Blue Grass, and all other kinds of Field and Garden Seeds. Call and examine quality and prices. Also dealers in FLOUR and FEED. EDSON & BECK, Sixth Avenue Feed Mill, 184 & 186 East Sixth Ave., Topeka, Kas.

## Topeka Medical and Surgical INSTITUTE.

ESTABLISHED IN 1882.

DRS. MULVANE, MUNK & MULVANE, Physicians in charge; also medical attendants at the Topeka Mineral Wells. Vapor and Medicated Baths. Special attention given to the treatment of Chronic and Surgical Diseases, and diseases of the Ear and Eye. 86 East Sixth Street, Topeka, Kansas.

### Fun, Facts and Fiction.

## SATURDAY EVENING TARGET

A PAPER FOR THE PEOPLE.

Devoted to Society, Lodge, Amusement and Dramatic News, good Literature, etc. Will be published especially for the State of Kansas. Terms, \$2 a year; \$1 for six months. Specimen copy free.

Address M. O. FROST & SON, Pubs., Topeka, Kansas.

Clubbed with the KANSAS FARMER for \$2.75.

## Farmers' Newspaper.

Every Farmer should have a good Weekly Newspaper.

### THE WEEKLY CAPITAL

Is the most complete Kansas weekly newspaper published. Sample copy free to every applicant Sent one year for \$1.00. Address,

WEEKLY CAPITAL,  
Topeka, Kansas.

### HOOSIER AUGER TILE MILL.

Mills on hand. Prompt delivery. FOR PRICES AND CIRCULARS, ADDRESS NOLAN, MADDEN & CO., Rushville, Ind.

### SEDGWICK STEEL WIRE FENCE

It is the only general-purpose Wire Fence in use, being a strong net work without barbs. It will turn dogs, pigs, sheep and poultry, as well as the most vicious stock, without injury to either fences or stock. It is just the fence for farms, gardens, stock ranges, and railroads, and very neat for lawns, parks, schools, etc. and cemeteries. Covered with rust-proof paint (or galvanized) it will last a life time. It is superior to boards or barbed wire in every respect. We ask for its fair trial, knowing it will wear itself into favor. The Sedgwick Gates, made of wrought iron pipe and steel wire, defy all competition in neatness, strength, and durability. We also make the best and cheapest all iron automatic or self-opening gate, also cheapest and neatest all iron fence. Best Wire Stretcher and Post Auger. For prices and particulars ask hardware dealers, or address, mentioning paper, SEDGWICK BROS., Man'rs, Richmond, Ind.

## The Home Circle.

### "The Washerwoman's Song."

In a very humble cot,  
In a rather quiet spot,  
In the suds and in the soap  
Worked a woman full of hope:  
Working, singing, all alone,  
In a sort of undertone,  
"With a Savior for a friend,  
He will keep me to the end."

Sometimes happening along,  
I had heard the semi-song,  
And I often used to smile,  
More in sympathy than guile,  
But I never said a word  
In regard to what I heard;  
As she sung about her friend  
Who would keep her to the end.

Not in sorrow nor in glee  
Working all day long was she,  
As her children three or four,  
Played around her on the floor;  
But in monotonous the song  
She was humming all day long;  
"With a Savior for a friend,  
He will keep me to the end."

It's a song I do not sing,  
For I scarce believe a thing  
Of the stories that are told  
Of the miracles of old;  
But I know that her belief  
Is the anodyne of grief,  
And will always be a friend  
That will keep her to the end.

Just a trifle lonesome she,  
Just as poor as poor could be,  
But her spirits always rose,  
Like the bubbles in the clothes,  
And though widowed and alone  
Cheered her with the monotone,  
Of a Savior and a friend,  
Who would keep her to the end.

I have seen her rub and scrub,  
On the washboard in the tub,  
While the baby sopped in suds,  
Rolled and tumbled in the duds,  
Or was paddling in the pools,  
With old scissors stuck in spools,  
She still humming of her friend,  
Who would keep her to the end.

Human hopes and human creeds  
Have their root in human needs.  
And I would not wish to strip  
From that washerwoman's lip  
Any song that she can sing,  
Any hope that songs can bring,  
For the woman has a friend  
Who will keep her to the end.

—Eugene F. Ware.

The foregoing excellent poem of Mr. Ware, who, by the way, is a Kansas poet, brought out the following letter from Hon. N. C. McFarland, of Topeka, now Commissioner of Indian affairs.

DEAR SIR: I have read again and again, with indescribable pleasure and sadness, your "Washerwoman's Song,"—pleasure because it is really beautiful, and voices correctly the joy of Christ's poor ones; sadness because you say you are shut out from a hope which, though not always so bright and cheerful, is worth more than all else this world affords. You will pardon me for addressing you in this public manner, for I know that many men of intellect and culture occupy positions not dissimilar to your own, and I hope in this way to make some suggestions which will reach both you and them, and not be inappropriate to the subject, whether they shall prove valuable or useless. Reading between the lines, I think I can see a thoughtful interest, a sort of inquiry, a desire to possess a hope like, or at least equal to, the heroine of your song. If this were not so, I could scarcely interest myself sufficiently to write you, for I confess I have but little patience with that class of criticisms that flippantly brushes aside the motives of God, Christ and immortality, as fit only for the contemplation of "women and children." To me, these mysteries are the profoundest depths. I have no plummet heavy enough, and no line long enough to reach the bottom. I may push them aside for a time, while other things engross me, but they come unbidden again and again across my path. Is it so with you?

What is God? It may be sufficient for some to answer, "God is a spirit, infinite," etc., but this answer gives very little light to

me. And yet I know I am amendable to laws definite and certain, with penalties positive and fixed, which I never made or agreed to be made, which no man or men ever made, and which I can never change, even in the most minute particular. Whence these laws? Is nature, with its exactitude, a chance? Who believes that? I have doubted whether there is a God, but I never disbelieved it. Bringing all my reasoning to bear upon it, I find that the best I can do is to dismiss the doubt as far as I can, and accept the facts.

Still but little is gained practically. The laws are known and the consequences of disobedience are known. What matters it whence they came? I have never seen God. I shall not see him with these eyes. I do not understand the methods of his government. They seem to be harsh and severe as often as they are kind and merciful. Death takes all too soon the gentle mother from her untrained child, as well as the worthless vagabond of whom the world is well rid. You do not understand it any better than I, but the fact remains. To know then that there is a God is nothing to us, unless it be a foundation upon which we can build something more.

Who then was Christ of whom the washerwoman sang day after day?

That such a man existed is not doubted. Think over all the best men you ever knew, and then select the very best, and tell me if he does not fall too far short for comparison. There are as good men living now as ever lived—men fully equal to Daniel, Isaiah or John, and far better than Moses, David, or Peter. Among the best, Christ stands out alone, and yet he was the boldest impostor the world ever knew if his mission was not divine. Christ was and is a fact. He comes across our way and must be disposed of. He was either the exemplification of God to men, or a most transparent fraud and hypocrite. I have doubted whether he was "God manifested in the flesh," but I never disbelieved it. If he was divine then

The "stories that are told  
Of the miracles of old"

are of easy belief.

As to the proof of immortality, you have, doubtless, pondered them well. They rest partly on God and Christ, and partly on the unsatisfying nature of this life. It is said that the average of human life is thirty-four years. Who can say that it is worth living at all? Pleasure and pain, joy and sorrow, light and darkness are about as equally divided as day and night. Who that has lived it would ask to live it again in just the same way, and without any benefit from the experience already passed? Infancy prattles into childhood, and childhood glides into youth, youth leaps into manhood, and manhood goes grudgingly into age; and in each successive stage, the dreamer anticipates that the next will bring something more substantial and satisfactory, but the anticipation is never realized, and the substantial and satisfactory never come. Do you not find it so? I have doubted my immortality, but I never disbelieved it.

If you ask me why the truth as to these momentous matters is not more clearly revealed, or why we were not given reason and judgment to fathom and understand them; I answer, I do not know. But that does not dispose of them. If I were to ask you why you have not reason and judgment to decide at once, and wisely, the ten thousand questions of every day life, your answer would be, I do not know. But, nevertheless, you go on reasoning, doubting, deciding, and doubting after you decide, fortunate indeed, if you are generally right; and certain, indeed, to be often wrong.

I have written thus far so as to be able to say, that, when you write, "I scarce believe a thing" your true position is, that you doubt whether the woman has a real foundation upon which to build her song. And if I am right in this, then further to suggest that there is nothing unusual or unreasonable in such doubts. Nay, more: when reason, judgment and all other faculties and means for arriving at truth are imperfect, it seems to me that a perfect faith is unattainable, and doubt becomes a necessity; of questions like these and many others, there is no absolute demonstration here and now.

Did it ever occur to you that the woman did not always have that serene faith which you ascribe to her? Do you not know that she often wondered, and wondering, doubted, not, perhaps, whether there is a God,

but whether He is merciful, or even just? Do you not know that, to her, it is an unsolved problem why she was left alone to support four children at one dollar a day, when you could make twenty dollars a day at work less burdensome and exhaustive? If she had called on you, when passing her door, to explain this problem to her poor understanding, what could you have said? She probably knew that it was as inexplicable to you as to her, and therefore did not ask. There is an answer, but neither you nor I occupy a plane sufficiently exalted to fully comprehend and speak it—"even so, Father, for so it seemeth good in thy sight."

There are two classes of people who may never doubt; the one who sees through these mysteries at a glance, or think they do; and the other, "who never had a dozen thoughts in all their lives."

The washerwoman sung away most of hers in her beautiful song; and shall we, who cannot sing, linger about Doubting Castle until Old Giant Despair entices us into his gloomy prison house? No, for while we see that there is doubt in reason, we will hold that there must be reason in doubt, and it must itself be dragged into the light, subjected to the severest scrutiny, and made our help rather than our ruin.

Galileo called doubt the "father of invention."

"Who never doubted, never half believed—where doubt, there truth is. It is its shadow."

One not given much to doubt and never to despair has said, "Now we see through a glass darkly." But there is a light—that light is Christ as revealed in the Scriptures. Blot it out and the darkness is to me impenetrable.

I have said nothing of the unseen help that comes to the weak of faith. Though mysterious, I believe in it. Your heroine knew of it. The heathen seemed to grasp it as if by instinct and crystallized it into the maxim—"The Gods help them that help themselves." Faith will grow if cultivated by good works, and the unseen help will be a friend that will keep us to the end.

Very truly, your friend,

N. C. McFARLAND.

### MR. WARE'S REPLY.

Upon reading the letter of Mr. McFarland, Mr. Ware wrote the following reply.  
To Hon. N. C. McFarland, Washington, D. C.:

I see the spire,  
I see the throng,  
I hear the choir,  
I hear the song,  
I listen to the anthem while  
It pours its volume down the aisle;  
I listen to the splendid rhyme  
That with a melody sublime,  
Tells of some far-off, fadeless clime—  
Of man and his finality,  
Of hope and immortality.

Oh, theme of themes!  
Are men mistaught?  
Are hopes like dreams  
To come to naught?  
Is all the beautiful and good  
Delusive and misunderstood?  
And has the soul no forward reach?  
And do indeed the facts impeach  
The theories the teachers teach?  
And is this Immortality  
Delusive unreality?

What hope reveals  
Mind tries to clasp,  
But soon it reels  
With broken grasp;  
No chain yet forged on anvil's brink  
Was stronger than its weakest link;  
And do not arguments maintain  
That many a link along the chain  
Can not resist a reason strain?  
And is not Immortality  
The child of Ideality?

And yet—at times  
We get advice  
That seems like chimes  
From Paradise—  
The soul doth sometimes seem to be  
In sunshine which it can not see;  
At times the spirit seems to roam  
Beyond the land, above the foam,  
Back to some half-forgotten home.  
Perhaps—this Immortality  
May be indeed reality.

—E. F. Ware.

Ask your Druggist for a free Trial Bottle of Dr. King's New Discovery for Consumption.

### How to Fall Asleep.

I have often noticed that when engaged in deep thought, particularly at night, there seemed to be something like a compression of the eyelids, the upper ones especially, and the eyes themselves were apparently turned upward, as if looking in that direction. This invariably occurred; and the moment that, by an effort, I arrested the course of thought and freed the mind from the subject with which it was engaged, the eyes resumed their normal position and the compression of the lids ceased. Now it occurred to me one night that I would not allow the eyes to turn upward, but keep them determinedly in the opposite position, as if looking down; and having done so for a short time I found that the mind did not revert to the thoughts with which it had been occupied, and I soon fell asleep. I tried the plan again with the same result; and after an experience of two years, I can truly say that, unless when something specially annoying or worrying occurred, I have always been able to go to sleep very shortly after retiring to rest. There may occasionally be some difficulty in keeping the eyes in the position I have described, but a determined effort to do so is all that is required, and I am certain that if kept in the down-looking position it will be found that composure and sleep will be the result.

It may be said that as the continued effort to keep the eyeballs in a certain position so diverts the attention as to free the mind from the disagreeable subject which it had been engaged, sleep will follow as a natural consequence. It is not improbable that this is to some extent correct, and if so, it is well that by means so simple and so easily adopted, such a desirable result can be secured. But I think this is not the only nor the principal reason. The position in which the eyes should be kept is the natural one; they are at ease in it; and when there is no compression of the lids or knitting of the brows, the muscles connected with and surrounding the eyes are relaxed. This condition is much more favorable for sleep than for mental activity or deep thought.—Chambers' Journal.

### Success with House Plants.

A lady whose beautiful plants are the delight of her life, and the envy of all her acquaintances, reveals the following secret of success: The soil is about two-thirds good garden soil, and the rest is sand. It is kept loose about the roots; they are watered as they appear to need it, and not according to any particular rule, but the chief reason for their wonderful growth and bloom is this: "When any of the leaves wither and fall, instead of picking them up and throwing them away, I make little rolls of them, and tuck them down in the earth, and let them decay, and this is the only fertilizer I have ever used. This," she added, modestly, "seems to be nature's way. And the plants that have the afternoon sun only, grow and rival those that have the morning sun."—Cultivator.

### To Prepare Pie Melon.

Some sister asked how to prepare pie melon. Cut it in small pieces—pick all the seeds out of course—cool it first in water until soft, drain all the water off, put in a cup or two of vinegar, according to the strength, cool a long time—two or three hours; then for pies season like green apples. They are better sweetened with sugar, but some use molasses.

Mystic, in addition to the Herbal Ointment, try wearing flannel next to the skin and be careful about taking cold.

### A MOTHER.

The man who never failed is a myth. Such an one never lived, and is never likely to. All success is a series of efforts, in which, when closely viewed, are seen more or less failures. The mountain is apt to over-shadow the hill, but the hill is a reality nevertheless. If you fail now and then, don't be discouraged. Bear in mind it is only the part and experience of every successful man, and the most successful men often have the most failures.

### "Rough on Rats."

Clears out rats, mice, roaches, flies, ants, bed-bugs, skunks, chipmunks, gophers. 15c. Druggists.

The Dalrymple farm produced 150,000 bushels of wheat and 40,000 bushels of oats this year.

## The Young Folks.

### Dressed For Meeting.

See my pretty ruffled dress!  
See my tenty locket!  
'Spects I'm most a lady now,  
'Cause I've got a pocket.  
These down here are my new shoes  
That I walks my feet in;  
Course it wouldn't do to wear  
Copper toes to meetin'.

See my picture hankerfust,  
Sunday days I has it;  
I can blow my nose in church  
Most like papa does it.  
Papa's hitchin' Jack and Gray,  
An' they keep a-prancin';  
Horses don't wear Sunday clothes—  
They don't know they're dancin'.

Grandpa used to go with us,  
Now he's gone to heaven!  
Guess he's at the angel church,  
Up where God is livin'.  
I don't take no cake with me—  
Never think of eatin',  
Don't you want a nice, clean kiss  
'Fore we go to meetin'?

—A. H. Poe.

### The Animals of the Congo.

The elephant is very abundant on the Upper Congo; and every morning, as you ascend the river, traces of their last night's devastations may be seen, for they seem to have a tendency towards wanton destruction and waste, being like parrots and monkeys in only eating about a quarter of the food they procure, and scattering the rest right and left with wanton caprice. So, on the islands of the upper river, where the graceful borassus palms grow in their thousands, each blue-green palm with its cluster of orange fruit, the elephant is to be constantly seen—sometimes in broad daylight, but more often toward sunset—breaking his way through the pillar-like clusters, destroying many a beautiful palm for the sake of those orange-colored stony dates of which he is so strangely fond. You may also see them, as I have, in the short hour of tranquil twilight, when the sky assumes a faint golden tone, when the great smooth sheet of water is of the same rich color, and stretches away toward the horizon of the broad, lake-like Congo, where it melts indistinguishably into the warm sky; then you may see the elephants walking out in Indian file from sheltering forests into the shallow parts of the river, where they disturb the perfect calm of its reflected gold with many ripples, looking like blue scratches on its surface. Here, if you are not too near, you may see them squirt streams of water over their dry, heated skins, and observe the mother-elephant carefully accompanying her young ones during the bath. But ordinarily it is at night time, and, above all, when there is a moon, that the elephants come down to drink and bathe. Moreover, they are much more commonly seen on the Congo during the dry season, as then the many little forest brooks are likely to be dried up, and the elephants are compelled to incur greater publicity in their bath by seeking the great Congo.

Hippotami are often a source of danger to native canoes, as they follow them at times and upset them by a jerk of their huge heads underneath. On one occasion, I had a personal experience of their spite or their ill-timed play, whichever it may have been. I was descending the Congo in one native canoe, and in another was some of my luggage. The first canoe, in which I was seated, with three Zanzibaris paddling, rounded a little promontory somewhat abruptly, and came suddenly on a group of hippotami sunning themselves near the bank. Three of them deliberately gave chase to the canoe, and for some time ran us perilously hard, keeping up within a few feet of the boat, and only occasionally showing their nostrils above water. At last they found that a stern chase was a long chase, and desisted, turning about and endeavoring to attack the baggage canoe, which was following. For a moment I feared for my luggage, but the natives who were paddling managed cleverly to elude the hippos, and put out into the middle of the Congo. Here the river-horses declined to follow, for I have observed they have a strong objection to swimming far out of their depth, and, moreover, would find it

hard to resist being carried away by the furious current that races down the middle of the stream. You may also be sure of avoiding a chase by hippotami if you steer your canoe toward the center of the Congo; but then, *en revanche*, you are likely to get into one of the many whirlpools and be upset, so it is rather a case of "out of the frying-pan into the fire." What keeps the hippotami from gambling in the middle of the river is an equally serious deterrent to canoe travelers. As for this great amphibian, he prefers, in the daytime, to frequent those large submerged sandbanks that are so common in the Congo. Here he generally stands upright, with his head and backbone rising above the water, and with many of his companions in a line. They yawn constantly, and the huge jaws are lifted in this action high above the water, displaying a pinky chasm of palate and throat. The grunting noise they make, and their great sighs of contentment as they relapse into the tepid water after a momentary inspection of the advancing canoe, may be heard for a long distance across the stream. Hippotami are distinctly reddish in color as seen in the water. They generally go in herds of nine and ten together, apparently consisting of one mature bull with four or five cows and their respective calves.

The female hippopotamus is passionately attached to her young, and during the first few weeks of its life lives almost isolated from her fellows, generally on land; I imagine that this is because the baby hippotami at an early age might form an easy prey to the voracious crocodiles. The males are much given to quarrelling even in the daytime, and, when fighting, utter strange boar-like squeals and grunts. It very often happens that an unfortunate bull, unable to obtain a mate, turns rogue, and lives a solitary life, seeking to wreak his spite on whatever may come in his way. There was one such beast who haunted the neighborhood of Mouata, a pretty station where I spent some six weeks, situated near the juncture of the Congo and Quango Rivers. This malicious creature was the terror of the natives in the adjoining villages, for he would lie in wait, amid the rushes, for the canoes returning home with the fishermen at dusk, and then swim out silently under the water and wreck them.

The ox is unknown, and his old classical Bahtu name, "Ng'ombu," or "Ng'ombe," is applied in Bayansi to the buffalo. The sheep is rarely met with beyond Stanley Pool; still it is known and named. It belongs to the Central African type—a hairy sheep with small horns, and a magnificent mane in the ram, which extends from the chin to the stomach, and greatly resembles the same appendage in the aoudad, or wild sheep of Northern Africa.

The goat of the Congo is a little, compactly built animal, short on the legs, and very fat. The females make excellent milch goats, and their milk is a most delicious and wholesome addition to one's diet. Unfortunately they run dry after three months' milking, and the only way to keep up a constant supply of this grateful fluid is to keep four or five of them at once, and arrange that they all kid at different times.

The general type of dog on the Upper Congo (on the lower river it is much mixed with European races introduced by the Portuguese) is simply our old friend the parish dog of India and the East over again, with a look of the dingo and the wild dog of Sumatra superadded. It has a foxy head, prick ears, a smooth fawn-colored coat, and a tail slightly inclined to be bushy, and is to my thinking a very pretty creature. They have one admirable point in their character in that they never bark, giving vent only, when very much moved, to a long wail or howl. Toward Europeans they are disposed to be very snappish and uncertain, but the attachment between these dogs and their African masters is deep and fully reciprocated. They are considered very dainty eaters by the natives, and are, indeed, such a luxury that by an unwritten law only the superior sex—the men—are allowed to partake of roasted dog. The cats on the Congo are lean, long-legged, and ugly, and offer every diversity and variety of color. Tabbies, however, are the most commonly seen. These cats are splendid mousers, or rather ratters, and help to rid the native villages of the small black rats which infest them.—*American Field.*

### This, That and the Other.

Follow up advantages.

Cheerfulness is a spark from heaven.

A man's best friends are his ten fingers.

Thinking is the talking of the soul with itself.

Failure should be the stepping-stone to success.

By the errors of others, the wise man corrects his own.

One swallow doesn't make a summer, but too many are dead sure to make a bumper.

Young ladies should not forget that Goliath died from the effects of a bang on the forehead.

The difference between a cat and a comma is that one has the claws at the end of the paws, while the other has the pause at the end of the clause.

A woman has suggested that when men break their hearts, it is all the same as when a lobster breaks one of its claws, another sprouting immediately and growing in its place.

An intemperate citizen of Rochester calls his stomach "Hades" because it is the place of departed spirits. And one in Cincinnati calls his "The Tomb" because its where the beer goes.

Some ingenious observer has discovered that there is a remarkable resemblance between a baby and wheat, since it is first cradled, then threshed, and finally becomes the flower of the family.

An American laundry has been started in Mexico and the inhabitants are so tickled with the idea that they think of suspending work and going to bed for a week to have their clothes washed.

An insane Rochester girl gets out of bed at midnight and goes to work sawing wood in the back yard. Her father deeply deprecates her insanity, but he always leaves the wood-pile handy for her to get at.

"Judge," responded Jim, "I don't really believe I stole dem chickens. In de first place, Jedge, nobody saw me take 'em. In de next place, dey could not be found on my premises, because I had done hid dem chickens under de floor. I can't help believin', Jedge, dat I is innocent as a lamb."

### Slate Making in Pennsylvania.

The Chapmanville quarries, in Northampton county, were opened in 1850, the first one being worked on a small scale in 1804. Here are located the Chapman and New York Slate Manufacturing Company, the Fischer Slate Company, and the Edelman Quarry. The quarry of the Chapman Company is a hole over 1,000 feet long, 300 feet wide, and 225 feet deep. It is called a flat rock quarry—the split of the slate inclining to the south at an angle of about ten degrees. The removal of the top is an item of considerable expense, varying with the location. When the top has been taken away a natural joint in the slate is sought, and if not readily found a hole is drilled and a blast made. The slate rock is split into blocks which are hoisted by means of derricks to the surface, when they are landed on trucks and moved along a track to the shanties where they are split.

"The splitter, with his mallet and broad steel chisels, sits on a block, and, taking a slab of slate between his legs, drives in his chisel a little way at one end. He moves it a little with a firm, gentle pressure, and you can see the split begin to start as straight as a die. He repeats the operation at the other end. Then he drives his chisel in the middle and easily pries the slab in halves. The split pieces are split and split again until they are of the required thickness. As fast as they are split a man who stands by the splitter takes the slates and runs them through the dressing machine. This is a cast iron form set on five legs, with a steel extension piece or arm about four feet long. Suspended over this is a steel knife which is attached to a spiral steel spring and worked by the foot of the dresser. A gauge board guides his eye and he puts his slate against it, presses his foot on the treadle, and down comes the knife, cutting the edge clean and straight. He makes the four edges straight, and lays the slate in piles according to size. Just as fast as his foot can work, a good dresser keeps his machine going. The splitter and dresser work together, and are paid according to the quantity they turn out."

Diamond saws having a reciprocating motion and making 140 strokes per minute are

also used. They cut only one way, being lifted by a cam for the return stroke. A constant stream of water clears the teeth of slate dust. The planers are similar to those used for planing iron, the polishing bed being of cast iron, 14 feet in diameter, and making 80 revolutions per minute.

A curious feature about the place is that the factory, engine house, smokestack, and many of the houses are built of slate blocks. There is a great demand for all kinds of labor in the whole region. Ordinary day laborers earn from \$1 to \$1.35 per day, and often more, according to the exigencies of the occasion. Carpenters earn \$2.25 to \$3.25. Bricklayers find work, but most new buildings are frame. Machinists are sought after daily, and make good terms, because practical men to work at the opening of new quarries and the erection of machinery are scarce. Slaters (splitters and dressers) earn from \$2.50 to \$4 and \$4.50 per day by the piece. Quarrymen can always find employment.—*N. Y. Sun.*

### Enigmas, Charades, Questions, Etc.

#### GEOGRAPHICAL QUESTIONS.—No. 1.

What country is worn by the ladies?  
What country is used for making shoes?  
What country does a singing-master use?  
What river is a tropical fruit?  
What gulf is a piece of money?  
What island describes a balloon as insane?  
What point of land is a colored man?  
What city is a fashionable cave?  
What island represents the serial region?  
What island is used for summer dresses?  
What river is a vegetable?  
What lake is a part of an animal?  
What mountain is used to put on horses?  
What city is a kind of grape?  
What river in Virginia is a boys' name?  
What islands are a number?

#### ENIGMA No. 29.

I am composed of eleven letters.  
My 2, 9, 20, is dried grass.  
My 1, 4, 5, 11, 8, is plural of that.  
My 6, 7, 8, is a cover.  
My whole will soon be here.

#### ANSWERS TO QUESTIONS.

Geographical Puzzle No. 4.—Answer: Charles, Turkey, Java and Mocha, Buffalo, Lima, Japan, China, Stockholm, Caroline, Cooks, Greece, Henry, Hungary.

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Henry Grebe	Stalk rake.
D. Lathrop & Co.	Christmas the year round.
Staples & Co.	Virginia farms.
Volatic Belt Co.	Electro Volatic Belt.
L. B. Silver	Chester White hogs.
Nolan, Madden & Co.	Auger Tile Mill.
James Vick	Vick's Floral Guide.
Aultman & Taylor	Engines.
Wells, Richardson & Co.	Buller Color.
Lowell Washer Co.	Washing machine.

We hear of a great deal of soft corn in the Northwestern States. The growing crop was caught by frost.

Congress met last Monday. The House is largely Democratic; the Senate is a tie between Democrats and Republicans.

Please remember that when the time of a subscriber has expired his name is taken off our mailing list unless the subscription is renewed.

The time is getting very short now until the end of the year. We want to start in the New Year with a large list. Send in your names for renewal without delay.

A farmer in North Carolina drew as his premium at a county fair in that State, a copy of the KANSAS FARMER, which had been offered by the management of the fair.

One of our readers, J. C., writing from Harper county, says that is a good place to plant a sugar factory. He has faith in Harper; crops were good; the soil, water, climate, everything in apple-pie condition, and land does not yet rate very high.

A woman writing in Dio Lewis Monthly offers a novel method of getting rid of polygamy in Utah. After showing that all the girls there are opposed to so much marrying, she suggests that young men be sent out from the States to marry these girls.

Some propositions to wool growers of Kansas are made in the FARMER this week by J. S. Emery, to which we invite attention. The manuscript came so late that we had not time to examine the nature and scope of the propositions and write out an opinion this week.

We are not offering premiums of cheap books or shoddy jewelry to induce persons to subscribe for our paper. We offer only the reliable, healthy, vigorous, old KANSAS FARMER, stronger and better than ever at the same old price, \$1.50 a year to single subscribers and less to clubs.

Thus far the season is mild. The only snow in this region was a few flakes one day—reminders, we suppose, that there is such a thing in this country as winter when times are favorable. Building has not yet been interrupted in Topeka. New houses are going up in every part of the city.

## Subsoiling and Moisture.

Every reader of this paper knows that it teaches the doctrine of deep plowing. We have repeatedly given reasons for the faith that is in us on this subject, chief among which are the preparation of a larger body of earth for plant roots to work in, and the better retention of moisture. So long as soil is practically new, and therefore loose and friable, any scratching of the surface will do for an average crop; but, under continuous cropping, this newness disappears and the soil becomes harder. If manure were plentifully supplied and well mixed with the soil, and green crops plowed under, surface fertility and softness would be retained indefinitely. This is never done. The rule is to get off all we can before we begin to put anything back by way of restoring the soil, and that improvishes not only the top soil, but also the subsoil and makes it harder and less easily penetrated by roots. Every experienced farmer knows the truth of these statements.

Our purpose in this article is to write of subsoil as it is affected by being broken up; and the particular effect to which we desire to call attention is its changed relation as to moisture. We do not mean the bringing up of subsoil and dropping on top of the natural surface. That is not a good operation, because it is a reversal of nature's methods which always proves disastrous. By thorough mixing with vegetable manures, by pulverizing and letting lie long enough for the making of a good soil, it will become as good as any; but farmers do not want to wait. The better method of subsoiling is to follow the ordinary turning plow with a machine that will break the subsoil and leave it in the bottom of the furrow to be covered by the next turning of the earth. This is the natural position, and nothing foreign is brought above to interfere with a perfect pulverizing of the earth. This way of breaking the subsoil improves its capacity for receiving and retaining moisture in proportion to the degree of its hardness both before and after breaking. A very hard subsoil will receive less moisture than one that is softer; and this is true of the same soils after as well as before breaking. A very fine, loose soil will receive a much larger quantity of water than lumpy, rough earth. This, applied to subsoil, is equally true, though the harder subsoil, if broken, will receive proportionately a greater quantity of moisture than hard, surface earth, because of the greater difficulty in running off or being evaporated. It is covered. But a hard soil broken, will receive and retain more moisture than hard soil unbroken, and all subsoils are hard to a greater or less degree. The deeper the subsoil is broken and the finer is the breaking, the greater will be its capacity for absorbing and holding water.

That is the theory, and the writer of this has seen it demonstrated so many times in his own experience and in that of others, that no doubt is left on his mind at all in that respect. But we have some new evidence to offer. Professor J. W. Sanborn Dean, of the Missouri Agricultural College, made some experiments bearing directly on this subject, and he reported the results under date of November 14, 1883, as follows:

As there is, by some, misconception of what subsoiling is, I will explain that it consists of following an ordinary turning plow by a plow of special construction, that loosens the soil to the desired depth below the point moved by the turning plow, and yet merely loosens without turning or bringing to the surface the subsoil.

Two areas of similar land, side by side, of one-tenth acre in area, each, were plowed 7 inches deep. No. one was subsoiled 9 inches deep, or stirred 16 inches deep in total.

September 12th, when the severe

drought had become very pronounced, I drove an inch gas pipe 15 inches deep in four places on each plot, mixed thoroughly the dirt of each plot and tested for moisture. From 960 grains of subsoil plat 97 grains of water were evaporated, or 10.10 per cent. From 960 grains of soil of unsubsided plat but 80 grains of water were lost, or 8.33 per cent.

This is 1.77 per cent less moisture, or for 15 inches of soil 110.625 lbs. water, an amount of much importance. The yield per acre was for subsided plat, of corn, at 76 lbs. per bushel, 70.1 bushels, and of stover or fodder 4,734 lbs. The unsubsided plat gave of corn 49.3 bushels and of stover 4,022 lbs. That this result is no accident, I am satisfied, for the proportion of corn to stover falls heavily off on the unsubsided plat, showing that at a critical period the subsided plat furnished moisture and, probably, excess of plant food over the unsubsided plat, to mature a heavy proportion of corn to stover. On subsided plat the proportion of corn to stover was per bushel of corn 67.5 lbs. stover. On unsubsided plat stover per bushel corn, 81.6 lbs.

It would seem that there ought not to be any dispute on this point. That settled, then follow some other important considerations. The first is, how long will one good subsoiling last? This, we suppose, would depend as much upon the nature of the soil as upon its hardness. If, like much of the Missouri subsoil, it is fertile, that would argue in favor of its retaining and showing effects of breaking much longer than if it is both poor and hard, because if hard soil, it would break in chunks, and these would not pulverize, though the interstices between them would soon be filled with drainage from the surface, and that would assist in preserving good effects of breaking. Sterile earth, unless it be sand, always tends to harden, while rich soil is always soft under natural conditions.

The full value of subsoiling can be estimated upon experiment only; and as we expect to refer to the subject often, nothing more will be added now further than that if, in connection with subsoiling a thorough system of manuring is adopted, the advantages following from the combination will be so great and so apparent that the item of cost will be of little consequence.

Sergeant Mason, who was imprisoned for shooting at the assassin Guiteau, was pardoned some days ago and is now with his family. A great many people censured the government for Mason's treatment, but we thought no other course was proper. Nobody blamed the Sergeant for shooting at the beast, and his better success would not have subjected him to any danger from mob violence, for the people were in sympathy with the effort. But the people cannot afford to destroy respect for law and obedience to lawful authority. Mason was a soldier; it is a soldier's duty to obey orders. His business was to guard the prisoner, not to kill him. Discipline is absolutely necessary in the army. If a citizen had been employed to do the guarding and he had killed the loathsome wretch, the case would have gone to the civil courts where the people's sympathies might have been noted in the trial. But a soldier must obey; that is his only duty and it is imperative. Nobody thinks any the less of Mason because he was moved to rid the world of a vile creature, that had forfeited his right to live, yet the law must be respected.

Edwin Snyder, Jefferson county, writes: Returning from a trip east I am much surprised to find so many farmers selling corn for 25 cents, when back there a very inferior article was worth 50 cents. I do not think Kansas farmers are yet appreciating the great value of our magnificent corn crop.

The Kansas Protective Union—the Mutual Life Association of Topeka—last week elected to its directory, J. B. Johnson, Dr. D. C. Jones, A. D. Robbins and William Wellhouse.

## Distributing Carp.

Last week one day the FARMER was telephoned from North Topeka that the Fish Commissioner with some carp was at the U. P. depot. The fish car was side-tracked, and the inmates, J. F. Ellis and his two clerks and a cook were as comfortable as any four well-fed and well-paid men could be. State Commissioner Gile, though old enough to be the father of all the Washingtonians, was a much busier man than either of them. He was doing the outside work—the rustling around.

The object of the visit was to distribute fish to such private persons as had made application for them. The car was on the return trip, having gone out from Washington some two weeks before, visiting Chicago, Omaha, Ogden and Denver. The FARMER, some weeks ago, made note of the fact that Commissioner Gile was engaged in stocking the streams of the State. He accompanied Mr. Ellis on the present trip through Kansas in order to assist in getting the fish properly placed. We are requested by Mr. Gile to state that he will assist any private person that applies to him, in getting a stock of young carp to start with. Mr. G. is very much interested in his work, and merits the good will of all the people for the good and unselfish work he is doing.

Mr. Ellis' car, in which the fish are transported, is, to all appearances from the outside, nothing more than a handsome car of the ordinary build, but on entering the front end, the peculiar arrangement strikes one immediately. The car is divided into three compartments. The first, or front end, is used on one side as an office and is furnished with two comfortable plush-covered settees, while the opposite side is fitted up as a closet for the stove, which supplies the heat, and a handsomely-finished lavatory. The middle or main part of the car is devoted to the tanks, which run the entire length of the space are solidly constructed of ash. The tanks are divided into several zinc-lined compartments in which the pails containing the fish are carried. The pails hold about a gallon of water each and contain to every pail twenty carp, ranging from an inch to three inches in length. The ceiling of this compartment is handsomely frescoed and the wood-work is of ash. At intervals along the sides the berths are arranged, corresponding with the upper berths of a Pullman sleeper. The tanks are all covered with tightly-fitting lids with flush, handles, and are used as divans, being supplied with chairs without legs which may be set around anywhere.

The third end is arranged as a cook's galley, and is supplied with everything necessary for preparing the delicacies which Uncle Sam's favored children are accused of having. The car is supplied with ice closets and lockers for stowing away the supplies and linen, and altogether is a complete success.

Under the car an apparatus is arranged for pumping the water contained in the tanks over the fish. The wheel of the car acts on a friction wheel connected with the pump, which sets the water in motion. The car is well ventilated and comfortable, and the crew, composed of the government agent, Mr. Ellis, and his assistant, John Heran and Ed. Burkets, and the cook, are apparently happy rolling over the country, supplied with everything for comfort and convenience.

Now that Tice is dead, the query is propounded—will we have any weather?

The office of the Chicago Evening Journal was burned out Saturday.



One fervent farmer writes to us, in renewing his subscription, that "your paper is worth ten times as much as it costs." That is encouraging, and if the paper is not better in 1884 than it has been in 1883, it will be because we cannot make it so. We will try very hard to improve.

"Stray Leaves" are acceptable, provided they have the autumn colors. Equally so are the well filled music leaves that are sent by Oliver Ditson & Co., the Boston music publishers, as specimens of their month's work in issuing songs and pieces for everybody and his friends.

The election of Mr. Carlisle, of Kentucky, Speaker of the House at Washington renders it reasonably certain that the tariff will cut a large figure in next year's national campaign. It may not be true that he is an out-and-out free trader but he is at most a "low tariff" man. His principal competitor, Mr. Randall, of Pennsylvania, is for "incidental protection," and it defeated him.

We wish that our readers, those of them who understand themselves specially addressed, will not forget that the FARMER is anxious about experiments made with listing plows last season. Such of our readers as have tested them or experimented with them, may be serviceable to thousands of other people by writing out facts for publication in this paper.

Some persons interested in establishing a sugar factory at Topeka, were here last week. They are practical men. One of them, Prof. Scovell, has been making sugar from sorghum cane two years. He is interested in the Champaign (Ill.) and Sterling (Kas.) works, where sugar has been made in paying quantities. It is too soon to state what will be the result of this visit.

Professor Snow's weather report for November says: "Only two Novembers on our sixteen-years' record have had more sunshine than this. The temperature was above the average. The rainfall and humidity were below the average, but there was an unusual number of morning fogs. The mild weather of the past three Novembers has been in marked contrast with the severe winter temperature of November, 1880, during the last week of which month a large crop of ice was harvested at Lawrence.

A Farmers' Institute is to be held at Osborne, in Osborne county, the 13th and 14th instant. President Fairchild and Professors Shelton and Popenoe will be present and deliver addresses. We learn through Mr. Mohler that all necessary arrangements are made to insure success. The editor of the KANSAS FARMER acknowledges receipt of an invitation to attend and help. If he is not there "in the body," he will be on hand "in the spirit," for he regards these Farmers' Institutes with very much favor.

The Weekly Capital has been enlarged to seven columns to the page, making fifty-six columns of twenty-one and one-half inches each. That is the largest paper printed in Kansas, and the proprietor, Major Hudson, deserves credit for his enterprise. He is an indefatigable worker, and then he wants to give the people their money's worth. He has opened a Farm Department which will add to the value of the paper. We wish the Capital great success, because it deserves it. If we do not miss our guess, it will one day be the boss political paper between the Mississippi and the Rockies. Hudson knows what a newspaper ought to be, and he is doing the work of two men now in the effort to build up the Capital.

Mahdi, the Mahammedan Prophet.

Mahammed's book, the Koran, gives the world to understand that in due time another prophet will appear to instruct the people. In the meantime, the ruler of Turkey is and assumes to be the true representative on earth of the great first Prophet. Some five years ago, Ahmed, styling himself Mohammed Ahmed, presented himself as the Mahdi or true prophet that is to come. He denounces the Sultan as no longer entitled to leadership, and he, the Mahdi, proposes to lead. Until recently he has attracted little attention, but just now he is the most prominent actor on the world's stage. He is making war in Soudan, and it is said that Turkey and Egypt and the Barbary States are so much infected with the new gospel that there is no telling what will be the result of this crusade upon the religion and politics of those countries.

The prophet predicted in the Koran is to bear the name Mohammed and to be descended in direct line from the great prophet himself. He is to come from Abyssinia, having with him the "companions of the elephant" and slaughtering in his first victory unfaithful Moslems, and such a prophet was predicted two centuries ago to appear when the Turkish power began to wane.

Profound as is the belief in his coming, and deep-seated the expectation of his success, there is little likelihood that fanaticism will make head against the breech-loader. But the Mahdi has at least the advantage of drawing his forces from the one region in which Islam is still spread by the sword. The Moslems of the West, as the African Moslems are known, are the most rigorous and faithful of Mohammedans. A population of 10,000,000 negro Mohammedans attests the preaching of the faith, a Moslem university on the West coast of Senegal is its own proof of the literature which the new religion has brought. In the great untrodden interior of Northern Africa Mohammedanism is to-day the one vital force in national and tribal life. For five years Mohammed Ahmed, the Mahdi, has been spreading his influence through this great region. In camps and monasteries, by caravan and foray, he has done his work. Dim reports of his meditations, his long, unconcealed fits, his eloquence and rapt inspiration have reached the outer world until at last he appears to win his first victory.

#### Excursion to Memphis.

The FARMER is in receipt of a poster and circular from the Kansas City Ft. Scott & Gulf railway company, stating that an excursion party is going over that line from Kansas and Western Missouri to Memphis on the 16th, 17th and 18th days of this month, December, 1883. Tickets for the round trip are advertised—the highest \$15 from Kansas City, and graded on down to \$14.15 from Cheryvale, and \$10 from Springfield, and less between that place and Memphis.

This will be a very interesting excursion, and we believe it will pay every Kansan that goes. The road is a new one, just opened, and the route has special interest for people of this State, because of its geographical location and the natural productions along the line. Kansas needs connection with the Southeast below the ice line on the great river, and this road furnishes that connection. Along the route are timber, coal, iron, and unlimited agricultural possibilities. When Topeka taps this Memphis route, and when Western Kansas hitches on, Memphis will be our chief market town outside the State.

We regard the Memphis outlet as most important to Kansas. We need another at Chicago; then our fair young empire will be forever stationed where

her people are secure in possession of both Southern and Northern markets without paying tribute to commercial centers outside the State. Because of the importance of the road and its consequences to Kansas, we feel interested in having as many of our folks as possible take a run over it, and this excursion offers a cheap trip. Train is to leave Kansas City at 6 p. m. These excursion tickets will be on sale the three days above named and will be good for ten days. For further particulars address J. E. Lockwood, G. P. A., Kansas City, Missouri.

#### Gossip About Stock.

Jack Splann has bought the stallion Endymion for \$10,000.

Walter Morgan & Son, Irving, Kas., have forwarded two car loads of high grade Herefords to Arizona Territory.

Wm. Brown, of Lawrence, has just made a valuable addition to his Jersey herd, by the purchase of one Holstein bull and two heifers from Wm. Hauke, Iowa City, Ia. Price \$612.

Returns show the present year far exceeded any year in exports of cattle and sheep from Canada. The total cattle shipped and for which space has been contracted in steamships to the 31st of December next is 55,674; total sheep 113,725.

Some smart Aleck telegraphed from Lawrence, Kas., to the Globe-Democrat of St. Louis, that cattle were dying in Douglas county of some unknown disease. People down that way were very indignant when the report was published, for there seems to be no foundation for it.

At the recent races in Dallas, Texas, some Kansas horses took part. Coriander was beaten by Isaac in 2:35½. McGregor won the fourth and fifth heats in 2:21. Sleepy Joe then went on and finished the race by winning the next two heats in 2:19½. "St. Cloud" 2d, McGregor 3d.

At the recent public sale of Holsteins, held at Chicago, Ill., the heifer calf, "Mercedes 3rd," daughter of the famous butter-producing Holstein cow, "Mercedes," was secured by Messrs. Smith & Powell, of Syracuse, N. Y., at a cost of \$4200, the highest price ever paid for a Holstein. The recent record of "Mercedes," in competition for the Breeders' Gazette's Challenge cup, in which she vanquished her Jersey competitors and reached the record higher than ever before reached, was: Her yield for 30 consecutive days was 99 lbs., 6½ ozs., of unsalted butter.

#### Inquiries Answered.

I have a colt that in some way injured the stifle joints of both legs, and in the morning, more than any other time, in backing him out of the stall or turning him around, his leg (generally one, only, at a time,) seems to stiffen, and then the stiffness goes away and he is able to move all right. Please tell me what to do to strengthen the parts.

A. G. E.

—Your colt probably sprained his legs in turning quickly, in slipping, in running through mud, or in some other way, and will come out all right if fed on loosening food and kept out of storms.

There is no better time to prepare orchard ground than in the fall. Break up deep, the deeper the better, and let lie until pleasant weather in spring. Then harrow; pulverize thoroughly, roll and plant.

I would ask if any one knows what ails my chickens. My hens are strong and healthy; the chickens that hatched in the summer—most of them—would peep and not be able to follow the hen for one or two hours, and then fall over and stretch out as though they had a fit, and some would die right away, and some would live two or three hours and die. Those that lived were strong and healthy. All that died did so before three days old. I lost about 800 out of 400 that way. I would like to know what make is the best incubator and where they are made and who makes them.

J. C.

—These queries are submitted to our poultry readers for reply, with the suggestion that J. C. may not have males enough for the females of his hennery.

The Pacific Incubator is made and sold by Geo. B. Bailey, San Francisco, Cal.; The Perfect Hatcher and Brooder is sold by the Perfect Hatcher Company, Elmira, N. Y. We do not know the price nor the quality of either. We never used an incubator.

## THE MARKETS.

By Telegraph, December 3, 1883.

### STOCK MARKETS.

#### Kansas City.

The Live Stock Indicator Reports:

**CATTLE** Receipts to-day, 1,884 head. The market was steady, particularly for stockers and feeders at about Saturday's prices. Sales ranged from \$4 for Texas and half-breeds to \$4 90 for native shipping steers.

**HOGS** Receipts since Saturday, 7,724 head. There was a weaker market to-day at a decline of 10c from Saturday's figures, sales ranging \$4 40a 4 87½, bulk at \$4 65a 4 75.

**SHEEP** Receipts since Saturday, 1,588. Market steady for good. 120 Colorado Improved wethers each, \$2 00; 98 Merino stock, averaging 74 pounds, at \$2 50.

#### Chicago.

The Drovers' Journal reports:

**HOGS** Receipts, 50,000; shipments, 2,000. Market weak and 10c lower. Packing, \$4 35a 4 75; packing and shipping, \$4 75a 5 40; light, \$4 25a 4 70; skips, \$2 75a 3 35. Market closed with 25,000 unsold.

**CATTLE** Receipts, 6,000; shipments, 1,700. Market steady and firm. Exports, \$6 15a 6 50; good to choice shipping, \$5 40a 6 00; common to medium, \$4 00a 5 30; Texas cows, \$3 00a 3 85.

**SHEEP** Receipts, 6,400; shipments, 700. Market steady. Good, \$4 00; choice, \$5 00.

#### St. Louis.

**CATTLE** Receipts, 1,100; shipments, 100. Market active and higher. Exports, \$6 00a 6 40; heavy shipping, \$5 50a 6 00; light, \$4 75a 5 50; butchers steers, \$4 00a 4 75; cows and heifers, \$3 00a 4 25; stockers and feeders, \$3 50a 4 25.

**SHEEP** Receipts, 1,100; shipments, 300. Market steady. Fair to good, \$3 75a 4 00; prime to fancy \$3 75a 4 25.

#### New York.

**CATTLE** Receipts, 4,700 head. Market active and higher. Native steers, \$5 20a 5 70; seven cars, common Texas steers, \$4 70a 4 95. No premium cattle offered.

**SHEEP** Receipts, 12,000. Market strong, steady and higher. Sheep, \$3 90a 5 50; export wethers, \$5 60a 5 80; lambs, \$5 00a 6 50.

**HOGS** Receipts, 3,600. Market firmer at \$4 75 a 5 50.

### PRODUCE MARKETS.

#### Chicago.

**WHEAT** There was a fair speculation to-day. Prices advanced ½¢ under the influence of corn, fluctuated and closed ½¢ lower January, ½¢ lower than Saturday. Sales: December, 96½¢; January, 96½¢; February, 97½¢.

**CORN** Demand active and strong feeling developed. Free offerings in the day caused a decline of ½¢, rallied 1½¢ and closed ½¢ over Saturday. Cash, \$1 45a 1 55, closing at \$1 55.

**OATS** Demand active, opened lower, and closed ½¢ higher. Cash, \$1 30a 1 30½¢.

**RYE** Quiet. 57½¢.

**BARLEY** Dull at 65¢.

**FLAX SEED** Firm at \$1 37.

#### St. Louis.

**WHEAT** Lower and slow. No. 2 red, \$1 00½¢.

1 01½¢ cash; \$1 00½¢ 1 01½¢, December.

**CORN** Opened lower and advanced; 47a 47½¢ cash; 47½¢ December.

**OATS** Lower. 27½¢ 28½¢ bid, cash.

**RYE** Better, at 44½¢ 45¢.

**BARLEY** Dull, at 50a 80c.

#### New York.

**WHEAT** Cash steady, options opened lower, recovered and closed firm. Receipts, 127,000 bushels; exports, 88,000 bushels. No. 3 red, \$1 04a 1 05½¢; No. 2 red, \$1 12a 1 13½¢; December sales 1,300,000 bushels, at \$1 10½¢ 1 11½¢; January sales 1,300,000 bushels, at \$1 12½¢ 1 13½¢; February sales 240,000 bushels, at \$1 14½¢ 1 15½¢.

**CORN** Cash, ½¢ lower, advanced ½¢, closing quiet and firm. Receipts, 101,000 bushels; exports, 90,000 bushels. Ungraded, 58a 63½¢; November, 59a 60c.

#### Kansas City.

Price Current Reports:

**WHEAT** The market to-day was again quite weak. Cash No. 2 red was nominal while December's bid at 82½¢ 83½¢, against 83c Saturday; January sold at 84½¢, against 84½¢ Saturday.

**CORN** There was a weak market to-day on change and values were lower than Saturday. Cash No. 2 mixed sold at 37½¢ 37½¢, against 38½¢ bid Saturday. December sold at 37c—1½¢ lower.

January and February were nominal, and May sold at 42½¢ against 40c Saturday.

**OATS** No. 2 cash, 23c bid, 24½¢ asked; December, 1 car, 23c; January, no bids, 25c asked; rejected cash, 1 car, 32c, special elevator.

**RYE** No. 2 cash, 45c bid, 46c asked; December, no bids nor offerings; January, 45½¢ bid, no offerings; rejected cash, no bids nor offerings.

**BUTTER** Choice butter is scarce and the general receipts are light. The tone of the market is better.

We quote packed:

Creamery, fancy..... 32a 33

Creamery, choice..... 26a 28

Creamery, old..... 15a 22

Choice dairy..... 23a 24

Fair to good dairy..... 17a 18

Choice store packed (in single packages)..... 11a 13

We quote roll butter:

Medium..... 10a 12

Choice, fresh..... 15a 16

**EGGS** The supply is fair and market unchanged at 25c for fresh lots. Lined and ice house stock 18a 22c.

**CHEESE** We quote consignments of eastern; full cream:

Young America 13½¢ 14c per lb; full cream flats 12a 12½¢; do Cheddar, 11½¢ 12c. Part skim:

Young America 11a 12c per lb; flats 10½¢ 11c; cheddar 10a 10½¢. Skims: Young America 9a 10c; flats 8½¢ 9c; Cheddar 8a 8½¢.

**APPLES** We quote consignments: fancy, \$3 00 per bbl; assorted, \$2 50a 2 75 per bbl; common to fair, \$1 75a 2 25. Home-grown, fair to good, 60a 75c per bus; choice to fancy, 90c a \$1 00 per bus.

**POTATOES** Market quiet. We quote consignments in car load lots 25a 30c in bulk for native stock; northern 30a 35c for Early Rose, Peachblows and other late varieties 35a 40c. Home grown in wagon loads 40c per bus.

**SWEET POTATOES** Home grown, from growers, 50a 60c per bus; for red; yellow, 70a 80c.

**BROOM CORN** Common 2a 2½¢ per D; Missouri evergreen 3a 4c; hurl 4a 5c.

**SORGHUM** We quote at 80a 85c per gal for dark and 86a 90c for best.

**Horticulture.**

**Propagating the Apple.**

*Kansas Farmer:*

In an article of the FARMER on the above topic, it states among other things — "that the root of an apple graft is not to supply the future tree with roots, but merely to start the cion or tree in growth, and that the main roots are mainly furnished by the cion."

This may seem possible in theory, but it is not in fact. The largest portion of trees have no roots on the cion, and when one has rooted it is slightly so an exception to the rule. It is true, some varieties have more roots than others, yet the roots are wholly on the root applied in grafting; and the explanation may be found from another cause. It seems rational to me that the returning sap from those weak-rooted kinds, as Winesap, Swaar, and others, is not congenial to the root growth. In all the large growing kinds there is a decided enlargement in the applied root below the graft, it always grows larger than the cion just above it, and such kinds have good, large and abundant roots, while in the feeble rooted varieties this enlargement is not perceptible, but often it is smaller below the cion, and shows that the trees of those kinds do better to appropriate the rising sap in developing vigorous trees than the roots do in using the returning sap, therefore are smaller rooted. Most all these small rooted trees are large growers. The Duchess of Oldenburg also suffers from an uncongenial root, in that the root appears to supply more sap than the tree can consume, and in consequence throws up sprouts from the root that was applied in grafting. Both evils—that of weak roots, and the slow growing habit of the Duchess of Oldenburg—can quite surely be remedied in what is known as double working. Graft them with weak roots on other grafted kinds, of strong grafted habits, like the Ben Davis, or better yet, the American Summer Pearmain and the Duchess of Oldenburg on C. Red June. There is no doubt in my mind but that the expense incurred in double working will be amply repaid in the firmer stand of the trees, and possibly in their better growth and fruitfulness.

There are certain varieties that are subject to what is known as root rot, that may be avoided by grafting or budding them on such as are not affected by it; just as the European Vintners are overcoming the effects of the Phylloxera by using the American varieties that successfully resist the evils of it, as the root or stock to graft on; and it is so far the only practical solution of this evil in those devastated regions, and the same applied to some weak American grapes may also assist them to live.

A. H. GRIESA.

**A Large Apple Tree.**

A correspondent of the Scientific American writes as follows concerning a large apple tree on the farm of Delos Hotchkiss, in Marion, Connecticut: I have just had exact measures taken, as follows: Circumference of the trunk near the ground, fifteen feet three inches; circumference of the trunk three feet from ground, thirteen feet nine inches; circumference of the trunk at forks, sixteen feet two inches; circumference of the two main branches, ten feet four inches and eight feet eight inches; circumference of nine smaller branches, from four to six feet each; height of tree, sixty feet; diameter of the tree top, 104 feet. A peculiarity of this tree is that it is what is termed "an alternate bearer;" five limbs bear one year and four the next. The usual yield

from the five limbs is about eighty-five bushels, although in a single instance it reached 110 bushels; and the four limbs vary from thirty-five to forty bushels. The fruit is said to be excellent for winter use, though on this point I can only speak from hearsay. The age of this venerable apple tree is estimated at about 175 or 180 years. Curiously enough the patriotic old tree marked the centennial year by bearing fruit on all its branches, the first time it was known to do so in its life, and it has continued to do so down to the present time. Some of the limbs are now dying, others are broken down; signs of decay appear in many places, and it is thought that this noble specimen will be numbered among the things of the past."

**A Winter Garden.**

At the end of summer, the garden being stripped of its contents usually presents in its neglect an unsightly spectacle. The trees stripped of their leaves, and the vines and tendrils of their foliage completes the picture of a barren waste until the winter snow comes to hide the utter desolation from public view. Usually there is nothing left to break the monotony but a few bean poles, some straggling currant bushes, the remains of a hot-bed and dangling grape vines chafing the terrace which still holds them up as a target to the fierce blasts of the winter winds. But these unpleasant surroundings may often be softened or improved by the planting of evergreens, that will not only delight the eye, but be of substantial service in breaking off the keen blasts of winter upon dwellings in exposed places, but also become a source of quiet comfort and enjoyment to fowls and even cattle, when planted in the vicinity of stock-yards and stables. Fowls live much of the time, if permitted to do so, among the evergreen boughs for which they seem to have a great affinity. It acts as a screen not only from the cold blasts of winter but forms a natural protection against the nocturnal incursions of owls and other birds of prey. In fact they never appear to enjoy themselves better than when dusting their plumage under an evergreen, and will often seek it at a great distance from their nest. But when to these are added the attractions of a green lawn and hot house and romping children over well kept walks, country life is by no means unenjoyable even in mid-winter among such surroundings as we have enumerated.

**Nurserymen's Directory.**

**THE YORK NURSERY CO.**—Home Nurseries and Greenhouses at Fort Scott, Kansas. Established 1870; incorporated 1881. Paid up capital \$41,000. Officers—J. H. York, Pres.; U. B. Pearson, Treas.; J. E. Allen, Sec'y. A full line of all kinds of Nursery stock, embracing everything adapted to the New West, from Nebraska to Texas. References:—First National Bank, Fort Scott, Kas.; Exchange National Bank, Denton, Texas; Sioux City National Bank, Sioux City, Iowa.

**PLEASANTON STAR NURSERY.** Established in 1868. J. W. Latimer & Co., Pleasanton, Kansas do a wholesale and retail business. Neighborhoods clubbing together get stock at wholesale, a specialty with us. Send for terms and catalogues.

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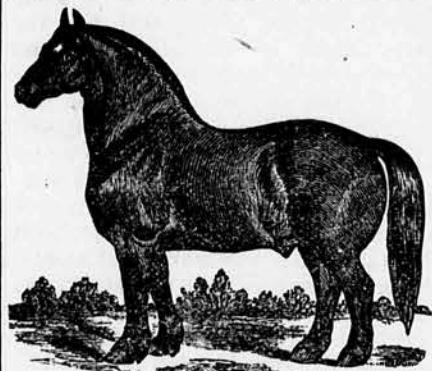
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HENRY AVERY, Proprietor,  
And Breeder of PERCHERON-NORMAN HORSES.  
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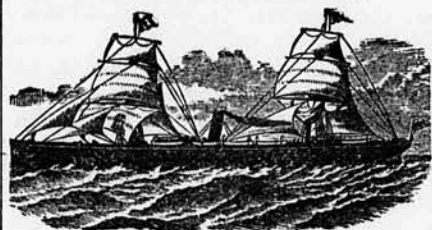
The oldest and most extensive breeding establishment in the West. My stock consists of choice selections from the well-known studs of E. Dillon & Co. and M. W. Dunham and my own breeding. I am prepared to furnish parties in the South and West. Imported, Native Pure Bred and Grades from the best strains ever imported, thoroughly acclimated, at prices as low as stock of the same quality can be had in America. QUIMPER No. 400—Insurance, \$5; season, \$15. NYANZA No. 8-9—Insurance, \$30; season, \$20. Good pasturage furnished for mares from a distance. Come and see my stock and get prices. Correspondence solicited.



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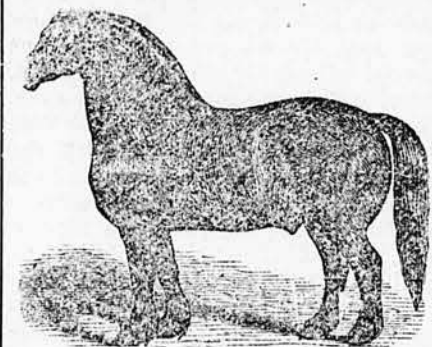
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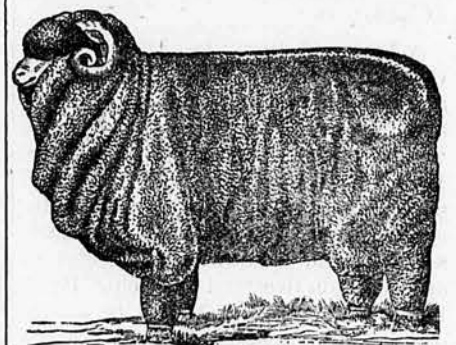
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And breeder of Short-Horn Cattle and Berkshire Hogs. My Short-horns consist of 26 females, headed by the Young Mary bull Duke of Oakdale 10,899, who is a model of beauty and perfection, and has proved himself a No. 1 sire.

My Berkshires number 10 head of choice brood sows, headed by Keilior Photograph 3561, who is a massive hog, three years old, and the sire of some of the finest sows in the State; assisted by Royal Jim, a young and nicely-bred Sully boar of great promise.  
Correspondence invited.  
Address **J. J. MAILS, Manhattan, Kansas.**

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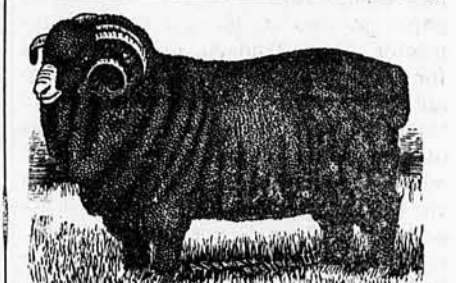
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**J. M. CLAY, President, Plattsburg, Mo.;**  
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**STUBBY 446—24 fleece, 29 lbs.; 3d, 28 lbs. 14 oz.; 4th, 29 lbs. 1 1/2 oz.; 5th, 31 1/2.**

**SAMUEL JEWETT & SON, Independence, Mo.,** Breeder and Importer of Pure Registered Merino Sheep of the best Vermont stock. Choice rams for sale. Satisfaction guaranteed on arrival or money refunded. We have 150 Rams that can't be beat. Call and see or write.



**R. T. McCULEY & BRO., LEF'S SUMMIT, Mo.,** Breeders of Pure Spanish Merino Sheep. 300 choice Rams of our own breeding and selections from some of the best flocks in Vermont, and for sale at reasonable prices. Satisfaction guaranteed or money refunded. Also Light Brahms and Plymouth Rock Chickens and Bronze Turkeys of the very purest strains. We solicit your patronage and guarantee a square deal.

## The Busy Bee.

### Italian Bees.

Mr. Wm. M. Kellogg, Knox county, Ill., in a late issue of the Germantown Telegraph, has this to say about Italian bees:

What a furore there was years ago when the Italian bee first came to abide with us; what great things were told of their doings; how much more they would work than our common home bees! In common with the rest of the bee-keepers, I too got the Italian bee fever; had it pretty severely, too, and tried my level best; worried, fussed and fretted because I could not get every bee with the prescribed three golden bands on her back! I agree with friend Elliott, that all the fulsome praise bestowed on the Italian bee is more than it justly deserves. Take the common native bee, give it the same "petting," exercise as much care in the selection of long-lived; prolific queens, the infusion of new blood, and the black bee will give as good returns as the Italian. If I were to work for extracted honey only, I would not have a pure Italian in the yard; they are so hard to brush off the combs, while the blacks and hybrids are very easy to brush or shake off. Yet I would advise all new beginners to begin with the pure Italian bees, for though they really produce no more honey, with the same care, than the blacks or hybrids, yet they are very much more gentle and less apt to sting when handled; and the fear of stings is one of the great "bug-bears" of a new beginner.

Opening a hive carefully, you will find the Italians quietly moving over the combs, and with careful handling combs may be taken out, carried into the house, and the work of queens' and bees can be seen going on as though they were in the hive, and not a bee will leave the comb. Not so with the hybrids and blacks; quick, ready for war on a moment's notice, and without provocation; restless and running to and fro, soon they begin to cluster on the lower edge of the comb, dropping off on the ground and on the person, stinging, too, many times, with danger always of the queen being lost in the dropping clusters. An Italian queen, for the same reason, is very much easier to find. There is only one claim for the Italians that I have always found to be true, and that is, they will keep moth better than the blacks, and this cannot be disputed. As to their claim of being better honey-gatherers, getting the honey from red clover and the like, my own experience will not verify it; yet there are abler men who claim it for them. Though in my own yard there are but very few pure Italians—and I care but little what my bees are, so that the queens are prolific and the bees active honey-gatherers—I would yet recommend beginners to start with the pure Italians; then when they get so used to them as not to be afraid of a sting now and then, they will feel no need of keeping up a pure stock.

It is well enough for the breeders to be particular in keeping their stock pure, but for the average bee-keeper it will not pay.

The introduction of the Cyprian I take to be but another addition to the fancy stock, in order to keep up the interest and profit.

### Imported Queens.

Farmer's Review:—No, a pure Italian queen, and mated with an Italian drone, will not produce any such marked bees. The mating of a queen does not affect her drone progeny, her drones will be pure black or pure Italian, as the queen is from black or Italian stock. An

Italian queen mated with a black drone will produce pure Italian drones, and black, one, two and three banded workers. On the other hand a black queen mated with an Italian drone will produce pure black drones, and like the other queen, the same grade of pure black, one, two and three banded workers.

Your drones having one band, and pure black, shows that you have not even a pure queen of either black or Italian, as her drones should be nearly all alike, though Italian drones vary somewhat in their markings, but all show the golden bands, and none are all black. You have a hybrid queen; (that is, one raised from an egg laid by a pure queen, mated with a drone not of her kind), mated with a black or Italian drone. If the most of the bees show one band, or all lack, she met a black drone, and vice versa. I do not think you have an imported queen at all. You may have gotten one in good faith from a reliable dealer, and introduced her, as you thought, safely, and yet she may have been rejected by the bees and they raised one of their own, or had one at the time the other was put in. There are many ways in which a queen could be lost, and blame should not be attached to a dealer till you know who is at fault. The bees from a pure imported Italian queen should show the three golden bands distinctly, though one band will be light in a hungry bee, and all three show plainly on a well filled bee.

WILL M. KELLOGG.

Oneida, Illinois.

HALL'S VEGETABLE SICILIAN HAIR RENEWER is a scientific combination of some of the most powerful restorative agents in the vegetable kingdom. It restores gray hair to its original color. It makes the scalp white and clean. It cures dandruff and humors, and falling-out of the hair. It furnishes the nutritive principle by which the hair is nourished and supported. It makes the hair moist, soft and glossy, and is unsurpassed as a hair dressing. It is the most economical preparation ever offered to the public, as its effects remain a long time, making only an occasional application necessary. It is recommended and used by eminent medical men, and officially endorsed by the State Assayer of Massachusetts. The popularity of Hall's Hair Renewer has increased with the test of many years, both in this country and in foreign lands, and it is now known and used in all the civilized countries of the world.

For sale by all dealers.

## HOLSTEIN CATTLE!

### 500 HEAD

Of the finest Quality and best families to be found in Holland.

### CLYDESDALE & HAMBLETONIAN HORSES

Rare inducements offered to purchasers on the finest quality of Stock. Send for Catalogues. Mention this paper.

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THE INVALUABLE DOMESTIC REMEDY!

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FOR SALE BY DRUGGISTS AND GENERAL MERCHANDISE DEALERS.  
For description of its uses, see next week's paper.

\$5 to \$20 per day at home. Samples worth \$5 free. Address Stinson & Co., Portland, Maine.

\$66 a week in your own town. Terms and \$5 outfit free. Address H. Hallett & Co., Portland, Me.

## FRUIT GROWERS

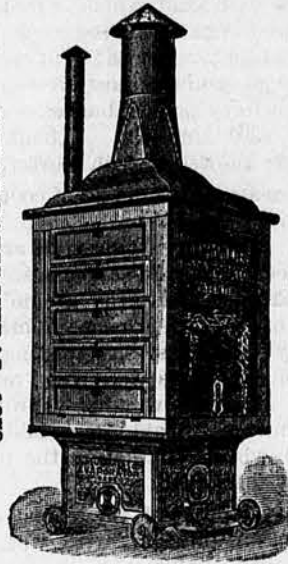
Write for Catalogue and Price List of Fruit Evaporators

Manufactured by the

## Plummer Fruit Evaporator Co.,

Leavenworth, - - Kansas.

GREAT PARIS MEDAL, 1878.  
California and Oregon Gold Medals, 1877, 1878 and 1880.



AWARDED THE CENTENNIAL MEDAL, 1876.

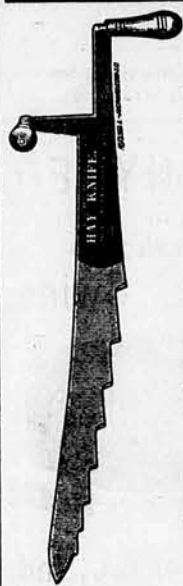
No person who has an orchard can afford to be without one of these Evaporators. Fruit dried by this process brings a higher price than canned goods. Seven sizes manufactured.

Price, \$75 to \$1,500.

Dries all Kinds of Fruit and Vegetables.

These Evaporators have been tested and pronounced the best Dryers ever invented. Unmarketable and surplus fruit can all be saved by this process, and high prices realized; for dried fruit is as staple as flour.

## GREAT SAVING FOR FARMERS.



## THE LIGHTNING HAY KNIFE

(WEYMOUTH'S PATENT.)



Awarded "First Order of Merit at Melbourne Exhibition, 1880."

Was awarded the first premium at the International Exhibition in Philadelphia, in 1876, and accepted by the Judges as Superior to any Other Knife in Use.

It is the BEST KNIFE in the world to cut fine feed from bales, to cut down mow or stack, to cut on stalks for feed, to cut peat, or for ditching in marshes and has no equal for cutting through from the side. Try it. IT WILL PAY YOU.

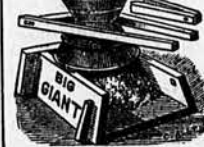
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HIRAM HOLT & CO., EAST WILTON, ME., U. S. A.

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## OUR NEW No. 7 FEED MILL

The Eighth Wonder of the World.



Don't fail to get description before buying. Warranted to grind faster and better than any mill of same price. The lightest draft mill. Has double force feed, and

CAST STEEL GRINDERS.

We also make big, Little and New Giants, the only mills that will grind with husk on.

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PERPETUAL HAY AND STRAW PRESS. Received First Premium at N. Y. State Fair, 1880, 1881 and 1882, over Diederick and others. THE ONLY PERFECT HAY PRESS MADE. Puts 10 tons in car. Most simple and durable. A bale every 2 minutes. Also Horse Powers, Road Graders, Cider Mills, Corn Shellers, Feed Cutters, etc. Manufactured by WHITMAN AGRICULTURAL CO., St. Louis, Mo.



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is simple, perfect, and cheap; the BEST FEED COOKER; the only dumping boiler; empties its kettle in a minute. Over 8,000 in use; Cook your corn and potatoes, and save one-half the cost of pork. Send for circular. D. R. SPERRY & CO., Batavia, Illinois.



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\$1000 Positively sure to Agents everywhere selling our New SILVER MOULD WHITE WIRE CLOTHES-LINE. Warranted. Please see right. Cheap. Sells readily at every house. Agents Every 100 Days Clearing \$10 per day. Farmers make \$500 to \$1200 during Winter. Handsome samples free. Address, GIRARD WIRE MILLS, Philadelphia, Pa.

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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 as once for a treatise and a Free Bottle of my infallible remedy. Give Express and Post Office. It costs you nothing for a trial, and I will cure you. Address Dr. H. G. ROOT, 183 Pearl St. New York.

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State & Monroe Sts., Chicago. Will send prepaid to any address their BAND CATALOGUE, for 1888, 200 pages, 210 Engravings of instruments, Suits, Caps, Belts, Pompons, Epaulettes, Cap-Lamps, Stands, Drum Major's Sticks, and Hats, Sundry Band Outfits, Repairing Materials, also includes Instruction and Exercises for Amateur Bands, and a Catalogue of Choice Band Music.

CARDS YOUR NAME on 50 New Chromo, our pack, 10c; 25 Mixed Cards, 10c; 25 Gold Edge, 15c; 15 Beveled Gold Edge, 10c; 25 Acquaintance Cards, 10c; 25 Horseshoe Chromo, 10c; 12 Slipper Cards, 15c; 15 Parisian Cards, name hidden by hand holding bouquet, 20c; 12 Photograph Cards, send photograph, we will return it, 50c. Agent's Guide, 15c. An elegant Premium for every order amounting to \$1. or more, given free. We have the largest variety of any Card house in the World. **BLANK CARDS** for Printers and Stationers, in any quantity, at very low prices, send stamp for price-list, none free. Address HUB CARD CO., 149 Milk St., BOSTON, MASS.

YOUR NAME printed on 50 Cards. ALL NEW designs of Gold Floral, Comemoratives, Sentiment, Floral, etc., with Love, Friendship, and Holiday Motives, 10c. 12 Cards (name concealed with hand holding flowers with mottoes) 20c. 7 Cards and this Ring for \$1. Agents' sample book and full outfit, 25c. Over 200 new Cards added this season. Price Cards at wholesale prices. NORTHFORD CARD CO., Northford, Conn.

Kills Lice, Ticks and all Parasites that infest Sheep. Vastly Superior to Tobacco, Sulphur, etc.



CHEAPEST AND BEST IN THE MARKET. **CARBOLIC SHEEP DIP.** CURES SCAB. This Dip prevents scratching and greatly improves the quality of the wool. From one to two gallons of the Dip properly diluted with water will be sufficient to dip one hundred sheep, so that the cost of dipping is a mere trifle, and sheep owners will find that they are amply repaid by the improved health of their flocks. Circulars sent, post-paid, upon application, giving full directions for its use; also certificates of prominent sheep-growers who have used large quantities of the Dip, and pronounce it the most effective and reliable exterminator of scab and other kindred diseases of sheep. G. MALLINGROD & CO., St. Louis, Mo. Can be had through all Commission Houses and Druggists.

## The MISSOURI PACIFIC RAILWAY

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For rates and other information, write to H. C. TOWNSEND, H. N. GARLAND, G. P. A., ST. LOUIS. W. P. A., KANSAS CITY

## The Poultry Yard.

### A Big Henery.

J. J. Gregroy, in American Cultivator, says: "I have read of many attempts in the country to keep poultry on a large scale, and some very plausible theories as to how it might be done, but with the exception of one moderately large one, located at Lancaster, I think the one described herewith is the only enterprise of the kind that to my knowledge has proved successful.

I started out last Saturday afternoon for a ride to the poultry farm of Mr. D. W. Andrews, located in Lynnfield, about six miles from my seed farms at Middleton. As I approached Mr. A.'s place I passed through the rockiest country my eyes ever rested upon; made up of low rolling hills, almost literally covered with large granite boulders, the largest of the size of an ordinary two-story house. They lay at every angle and in every position, sometimes piled up two or three deep, and so thick that at a glance it appeared impossible for the thin woods to find standing room among them. They were evidently the remains of moraines that had stretched away from the ancient glaciers that must once have covered this region. Immediately adjoining the hilly, rock-covered country, I came to a large, smooth, stoneless, treeless plain, on which the town of Lynnfield is built.

At the junction of these two strongly contrasted formatures was the farm of Mr. Andrews. It is surrounded on three sides with these rocky, wooded hills, and has in front a pond, while a stream of water, which is rarely dry, runs through the middle of it. The area occupied by the poultry coops is but two or three acres. I had a kindly reception by Mr. Andrews, who frankly answered my many questions. Mr. A. has been in the business about thirteen years, ten of these at the place he now occupies. He keeps about 1,500 hens through the winter and 4,000 or 5,000 during the summer and fall. He changes them, raising his own chickens every two years.

The breed he has selected as, on the whole, the most profitable is a cross made by breeding pure Yellow Leghorn roosters to pure white Bramah hens. He uses old roosters for breeding purposes. He sets his hens (I understand he does not use an incubator) all along the course of the winter and spring, and markets many broilers in April. The broods average eight or ten each, but of these he raises but about half, owing to depredations from foxes, weasels, mink and owls from the woods close by. He gives them one warm meal a day, each morning, which consists usually of boiled fishes' heads and onions, thickened up with meal. For the remainder of the day he gives them all they will eat of oats, corn and wheat screenings. Occasionally he mixes a little sulphur with the meal. Has no trouble from disease of any kind and to my eye the fowls were in the finest health. In summer he gives them free range, and they ramble beyond his bounds into the woodland around. In winter they are cooped up.

The close coops have a single patch, and are 12x12 in the open portions, and 6x12 in the inner or close part. The outer part is two laths high and entirely open at the top. The close part has glass sashes in front, covering a space of 2x9 feet. There is one low entrance for the hens. The coops are continuous, built in ranges, having from seven to twelve in each range. There is a narrow, unbroken passage way in the back part of the close portion through each range. Along the passage way, lathed off from the coops, feed and water vessels stand by each coop accessible to the

hens. There is an opening for ventilation about ten inches square on front, and at near the highest portion of the close coops. The roosts are strips of board but little above the ground, with board floor beneath to catch the droppings, which are cleaned off daily. The coops are thoroughly whitewashed inside and out once or twice a year with ordinary whitewash. The roosts and parts near are thus whitewashed several times. The floor of the inner coop is covered with sand, which is removed as deep as it is dark colored each spring, and sold for manure at \$6 per cord. The droppings from the roost are sold to tanners for forty cents a bushel, and bring about \$300 annually. About fifteen hens are allowed to each rooster.

There are twelve ranges of coops, having from seven to twelve coops in each range. The ranges themselves are about sixty feet apart. Powdered oyster shells lie scattered about the grounds. In most of the open coops remarkably healthy plum trees were growing. The coops and grounds were very neat and clean. Mr. Andrews employs two hands the year round to aid him in taking care of his fowls and marketing the product of his poultry barn.

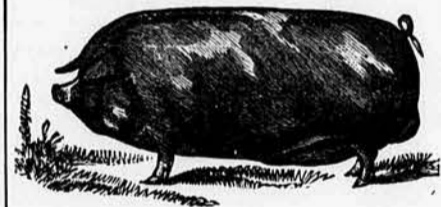
As to the profit of the business—the winding-up question with which the live Yankee challenges every enterprise—Mr. A. stated that he estimated it from \$1.25 to \$1.50 each hen. I inquired among some of my friends who were his neighbors, and found that they were all agreed that he had made a profitable business of his henery and gave me some facts to prove that it must be so. I passed a most interesting half-hour in examining this successful poultry farm.

The public debt is now about \$1,800,000,000. Of this about \$1,300,000,000 bears interest and about \$500,000,000 does not.

The vote in Democratic caucus for Speaker was—Carlisle 104; Randall 56; Cox 29.

## LOCK & SNYDER,

BREEDERS OF  
**PURE BRED  
Poland-China Swine,**



Remington, Jasper Co., Ind.

At the head of our herd are  
**The NOTED BREEDERS**  
"HOOSIER TOM," & "GRAND DUKE,"  
1625 O. P. C. R. 2533 O. P. C. R.

All Our Breeding Stock is Registered.

Our breeding for 1883 has been very successful and entirely satisfactory.  
Pigs for sale now, both boars and sows. Will sell our yearling boar "L. & S. Perfection," 1st premium hog at Kansas City fair, 1883.

### Sows Bred.

We will breed on order, a number of sows sired by "Hoosier Tom" to "Grand Duke," and also a number of sows sired by "Grand Duke" to "Hoosier Tom," at reasonable prices.

### Choice Fall Pigs.

We have for sale this Fall and Winter about 100 Fine Fall Pigs, sired by "Hoosier Tom," 1625 O. P. C. R., "Grand Duke," 2533 O. P. C. R., and "L. & S. Perfection," 3993 O. P. C. R.; also a few pigs sired by "Banner Tom" and "Lail's Grand Duke."  
Prices reasonable. Special Express rates.



Chester White, Berkshire and Poland-China Pigs, choice Setters, Scotch Shepherds and Fox Hounds, bred and for sale by ALEX. PEOPLES, West Chester, Chester Co., Pa. Send stamps for circular and price-list.

**2806 Lbs. Weight**  
OF TWO OHIO IMPROVED CHESTER HOGS, Send for description of this famous breed. Also Fowls.  
L. B. SILVER, CLEVELAND, O.

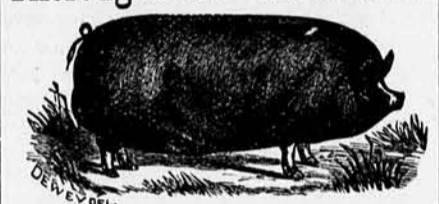


JAYHAWKER 3895.  
Owned by J.V. RANDOLPH, Emporia, Kas.



LORD CORWIN

### Thoroughbred Berkshires.



I will close out my entire herd of Berkshires very low. All my stock are Imported English Berkshires, are recorded or eligible to registry—or their direct produce. The sows have all been bred to imported boars. The entire herd have been a Prize-winning Herd everywhere shown and consist of the choicest strains. I will also sell 13 Short-horn Bull Calves.  
Address C. G. McHATTON, Fulton, Mo.

### PLEASANT VALLEY HERD —OR— Pure-bred Berkshire Swine.



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

### BONNIE VIEW STOCK FARM.



We have 150 choice Recorded Poland-China Pigs this season.

Stock Sold on their Merits.  
Pairs not akin shipped and satisfaction guaranteed. Low express rates. Correspondence or inspection invited.  
M. F. BALDWIN & SON, Steele City, Nebraska.



### Poland China and Berkshire Hogs.

We have the largest herd of pure bred hogs in the state. For ten years past we have been personally selecting and purchasing, regardless of cost, from the leading Poland-China and Berkshire breeders throughout the United States, choice animals to breed from and breeding them with much care. By the constant introduction of new blood of the best strains of each breed we have brought our entire herd to a high state of perfection. We keep several males of each breed not of kin that we may furnish pairs not related. Chang 263 and U. S. Jr. 781, American Poland-China Record; and Peerless 2135 and Royal Nindenere 3347 American Berkshire Record are four of our leading males. We have as good hogs as Eastern breeders here. We have over \$10,000 invested in fine hogs and the arrangements for caring for them, and cannot afford (if we were so inclined) to send out inferior animals. We intend to remain in the business and are bound to keep abreast of the most advanced breeders in the United States. If you want a pig, or pair of pigs, a young male or female, a mature hog, or a sow in pig, write us.  
**RANDOLPH & RANDOLPH,**  
Emporia, Lyon Co., Kas.

### River Side Herds —OR— POLANDS and BERKSHIRES.

With Jayhawk 3895 and Quantrell 2d, a perfection pig at the head of my herd of Black Bess Sows, I think I have the three most popular strains of Polands, and as fine a herd of hogs as the country can produce. My breeders are all registered, and all stock warranted as represented. Prices reasonable. My stock is always ready for inspection. Call around; the latch-string is always out.  
J. V. RANDOLPH,  
Emporia, Kansas.

Established in 1868.  
Stock for sale at all times.

### J. A. DAVIS, West Liberty, Iowa, Breeder and Shipper of PURE POLAND-CHINA HOGS.

Herd numbers 150 head of the best and most popular strains in the country.  
YOUNG STOCK FOR SALE.

### Improved Poland-China Hogs



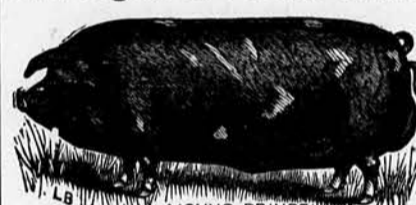
We have been breeding Poland-China Hogs for twenty years. The long experience obtained has enabled us to select none but the choicest specimens for breeding purposes. We now have

### Hogs of Quick Growth.

Easily fattened and early matured, showing a great improvement in form and style, especially in the head and ears.  
Our breeders consist of the finest lot of Sows and three of the best Boars in the State, being descendants from the best families in the United States. Those wishing choice pigs should send orders in early as there is a very large demand for stock. Mail orders filled with dispatch. Pedigrees furnished with all hogs sold.

S. V. WALTON & SON,  
P. O. Wellington, Kansas; Box 307.  
Residence, 7 miles west of Wellington, near Mayfield.

### Thoroughbred Poland-Chinas



YOUNG PRINCE.

AS PRODUCED AND BRED BY  
A. C. MOORE & SONS, Canton, Illinois.

We are raising over 800 pigs for this season's trade. Progeny of hogs that have taken more and larger sweepstakes and pork-packer's premiums than can be shown by any other man on any other breed. Stock all healthy and doing well. Have made a specialty of this breed of hogs for 37 years. Those desiring the thoroughbred Poland-Chinas should send to headquarters. Our breeders will be registered in the American Poland-China Record. Photograph of 34 breeders, free. *Swine Journal* 25 cents. Three-cent stamps taken.

### Acme Herd of Poland Chinas



Fully up to the highest standard in all respects. Pedigrees, for either American or Ohio Records, furnished with each sale. All inquiries promptly answered.  
Address M. STEWART, Wichita, Kansas.

### Riverside Stock Farm.



COLER'S CHOICE '1318.

Herds of pure-bred and high grade Short-horn Cattle, Poland-China Swine, Shepherd Dogs and Plymouth Rock Fowls. Our sows to farrow this spring were bred to Blackfoot 2201, Eclipse (Vol. 6) and Roderick Dhu 1921. We are booking orders now for spring pigs.  
For further information, send for circular and price-list. Address MILLER BROS., Box 298, Junction City, Kas.

CARDS 50 Satin Finish Cards, New Imported designs, name on and Present Free for 10c. Cut this out. CLINTON BROS. & CO., Clintonville, Ct.



**Treatment for Footrot in Sheep.**

The remedies for footrot in sheep are so numerous it is difficult to determine which is best, but many of them are effectual when the feet are properly prepared, and the remedies properly applied, and herein lies much of the secret of curing the disease. In the first place, some contrivance for holding the sheep at ease and handy for the operator is necessary; this is found in Blakely's Sheep-chair, which is a sort of box on four legs, just high enough when the sheep lies on its back, to be convenient for a man to work handy while standing; the box holding the hind part of the sheep being a little lower and the operator standing behind the box will face and have a fair view of his work. One side of the box is adjustable and can be slipped in or drawn out and conform to any sized sheep, holding it close and snug. Now a pair of strong toe-nippers and a couple of sharp thin knives are necessary. Shoe-knives, with blades curved a little, are best; one quite narrow and one the ordinary size—the narrow one to be used between the hoofs and in turning short corners, which is necessary many times in trimming the feet ready for the medicine.

Now, with the tools at hand, divest the hoof of every diseased part, being careful not to start the blood, for when the blood is mixed with the medicine it coagulates and destroys the effect, and must be cleaned off and another application made; then with a swab soak the diseased feet with butter of antimony and smear them over with tar; put the sheep for a few hours on a barn floor or some place where the remedy can't be rubbed off until it has the desired effect. If you are determined to drive the disease from the flock without regard to cost or trouble, a solution of blue vitriol as strong as it can be made and as hot as the hand can bear, is perhaps surest, for by holding the foot in it for a few minutes it penetrates every part where the disease can find lodgment, and then it is not so painful and biting as some of the caustics are. Blue vitriol finely pulverized and thickly mixed with tar and put on with a paddle, is a good remedy and easily applied. Tar does no direct good toward killing the foot-rot; it only holds the vitriol in place, keeps flies off, and heals the sore after the caustics have done their perfect work, and it even facilitates the operation of the caustic.

When maggots have been in a sheep's foot for some time, no caustic medicine is necessary to kill the rot, for the maggots eat out the virus and kill the disease, and all that is necessary to do is to clean off the foot and smear it over with tar and it will be well in a few days. By an observing flock-master maggots can be detected in a sheep's foot some distance off, by the sheep holding up the maggoty foot, which looks swollen and black between the claws, and can be plainly seen while the sheep is going from you; if it is not attended to at once the sheep is lost from the spread of the maggots on the body. After a rain is the best time to doctor foot-rot; then the hoof is soft and cuts easily, but in a dry time some Merino sheep's hoofs are hard as horn and require considerable muscle to cut through them. To be an expert in doctoring foot-rot a man should have good eyesight and be quick and handy with tools; a bungling, awkward fellow had better split rails.—*N. Y. Tribune.*

By special invitation a number of learned men examined animals affected with swell-head or lumpy-jaw at Chicago last week, but nothing new was discovered. Dr. Belfield, who has given this peculiar disease more attention than any other person, was asked as to

the probable effect of the disease upon the meat of an animal, said that it was not known that the meat was always infected, since there were cases in which the disease seemed localized. In many cases the parasite spread through the animal and the flesh then became dangerous; but, should the disease be confined to the jaw and not become communicated, it could not be said to be dangerous. However, the Doctor seemed prepared to refuse a beefsteak that should be cut from an infected animal.

**Potato Storage.**

Even on so homely a subject, much remains to be learned. We copy from the Country Gentleman, where the question is asked and answered:

What is the best way to store potatoes for the approaching winter? If placed in a cellar, they should not be heaped upon the bottom, but either be deposited in bins, or in boxes, barrels or hogsheads. The bins should be partly open at the bottom, the narrow boards or planks being placed an inch apart, and these being some inches above the cellar bottom to admit air. Large boxes raised half a foot on cross timbers do equally well. The boxes used by nurserymen for sending trees to their customers are just the thing. One will hold twenty bushels or upward. Coarse sacking or tight board covers are required to exclude the light. If barrels or hogsheads are employed, holes should be bored in the bottoms, and timbers placed under them.

In past years it was common to bury potatoes in heaps, ample cellar room not having been provided in those days. Many bushels were lost from imperfect protection and the want of ventilation. Sometimes they were frozen, but more commonly the tops of the heaps were found rotten when opened, the result of the accumulation of foul air there, and the want of ventilation at the apex. They were often spoiled by too much dampness. All these difficulties were at once obviated by using enough straw and making a ventilating hole at the top. A foot of packed straw was found sufficient to absorb the extra dampness, as well as to exclude frost. A few inches of earth on the straw outside, beaten smooth and compact, were all that was required to keep the straw in position. A hole made in the apex of the heap, two or three inches in diameter, stopped with a loose wisp of straw, allowed the foul air to escape. During the coldest weather it was more compactly closed. A well drained spot must always be selected. We have known heaps of potatoes containing 70 or 80 bushels, thus kept through the winter, and opening fresh and in excellent condition in spring, with the loss of scarcely a peck of the roots. Where farmers have raised large crops this year, to be kept till spring, and have not ample cellar-room, this mode may be successfully adopted. In grain-growing regions they have an abundance of straw for such purposes.

Rev. Mr. H— was a good man—that is, as good as a tobacco chewer can be, but rough in his ways. One day he was caught in a shower in Illinois, and going to a rude cabin near by, he knocked at the door. A sharp looking old dame answered his summons. He asked for shelter.

"I don't know you," she replied, suspiciously.

"Remember the scriptures," he replied: "Be not forgetful to entertain strangers, for thereby some have entertained angels unawares."

"You need not say that," quickly responded the other; "no angel would come down here with a big quid of tobacco in his mouth." She shut the door.

**"Buchu-paiba."**

Quick, complete cure, all annoying Kidney, Bladder and Urinary Diseases. \$1. Druggists.

**High Steeples.**

The following are the heights of a few of the tallest steeples:

	Feet.
Pisa, leaning tower.....	179
Baltimore, Washington Monument.....	210
Montreal, Notre Dame Cathedral.....	220
Boston, Bunker Hill Monument.....	221
Montreal, English Cathedral.....	224
Paris, Notre Dame.....	224
Bologna, leaning tower.....	272
Cairo, minaret of Mosque of Sultan Hassan, highest Mohammedan minaret in the world.....	282
New York, Trinity Church.....	284
Florence, Campanile, or Giotto's Tower.....	292
Lincoln, Cathedral.....	300
Washington, Capitol.....	307
Venice, Campanile.....	322
New York, St. Patrick's Cathedral (to be when completed.....)	330
Utrecht, Cathedral (formerly 364).....	338
Florence, Cathedral.....	352
Milan, Cathedral.....	355
London, St. Paul.....	365
Brussels, Hotel de Ville.....	370
Lubeck, Cathedral.....	395
Antwerp, Cathedral.....	402
Amiens, Cathedral.....	422
Hamburg, St. Micha.....	428
Landshut, St. Martin's.....	435
Cairo, Pyramid of Chephren.....	446
Vienna, St. Stephen's.....	449
Cairo, Pyramid of Cheops (original height 480).....	450
Rome, St. Peter's.....	455
Rouen, Notre Dame.....	465
Strassburg, Cathedral.....	468
Hamburg, St. Nicholas.....	473
Cologne, Cathedral.....	511
Washington Monument (to be).....	555

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AYER'S CATHARTIC PILLS are the best of all purgatives for family use. They are the product of long, laborious, and successful chemical investigation, and their extensive use, by physicians in their practice, and by all civilized nations, proves them the best and most effectual purgative Pill that medical science can devise. Being purely vegetable no harm can arise from their use, and being sugar-coated, they are pleasant to take. In intrinsic value and curative powers no other Pills can be compared with them; and every person, knowing their virtues, will employ them, when needed. They keep the system in perfect order, and maintain in healthy action the whole machinery of life. Mild, searching and effectual, they are especially adapted to the needs of the digestive apparatus, derangements of which they prevent and cure, if timely taken. They are the best and safest physic to employ for children and weakened constitutions, where a mild but effectual cathartic is required. For sale by all druggists.

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**DR. DYER'S**

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PLECTRO-OLTAIC BELT, and other ELECTRIC APPLIANCES, will cure in Thirty Days' Trial, TO MEN, YOUNG OR OLD, who are suffering from NERVOUS DEBILITY, LOST VITALITY, and those diseases of a PERSONAL NATURE resulting from ABUSES and OTHER CAUSES. Speedy relief and complete restoration to HEALTH, VIGOR and MANHOOD GUARANTEED. Send at once for Illustrated Pamphlet free. Address

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I have a positive remedy for the above disease; by its use thousands of cases of the worst kind and of long standing have been cured. Indeed, so strong is my faith in its efficacy, that I will send TWO BOTTLES FREE, together with a VALUABLE TREATISE on this disease, to any sufferer. Give Express and P. O. address.

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AGENTS: J. H. Money who send Dr. Chase's Family Physician. Price \$2.00. Specimen pages free. Address A. W. Hamilton & Co., Ann Arbor, Mich.

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By the central position of its line, connects the East and the West by the shortest route, and carries passengers, without change of cars, between Chicago and Kansas City, Council Bluffs, Leavenworth, Atchison, Minneapolis and St. Paul. It connects in Union Depots with all the principal lines of road between the Atlantic and the Pacific Oceans. Its equipment is unrivaled and magnificent, being composed of Most Comfortable and Beautiful Day Coaches, Magnificent Horton Reclining Chair Cars, Pullman's Finest Palace Sleeping Cars, and the Best Line of Dining Cars in the World. Three Trains between Chicago and Missouri River Points. Two Trains between Chicago and Minneapolis and St. Paul, via the Famous

**"ALBERT LEA ROUTE."**

A New and Direct Line, via Seneca and Kankakee, has recently been opened between Richmond, Norfolk, Newport News, Chattanooga, Atlanta, Augusta, Nashville, Louisville, Lexington, Cincinnati, Indianapolis and Lafayette, and Omaha, Minneapolis and St. Paul and intermediate points.

All Through Passengers Travel on Fast Express Trains.

Tickets for sale at all principal Ticket Offices in the United States and Canada.

Baggage checked through and rates of fare always as low as competitors that offer less advantages.

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**GREAT ROCK ISLAND ROUTE**

At your nearest Ticket Office, or address

**R. R. CABLE, E. ST. JOHN,**  
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The ATCHISON, TOPEKA and SANTA FE R. R. CO. have now for sale

**TWO MILLION ACRES**

Choice Farming and Grazing Lands, especially adapted to the Wheat Growing, Stock Raising, and Dairying, located in the Cottonwood Valley and also in

on the 38th parallel, the favored latitude of the world, free from extremes of heat and cold; short winters, pure water, rich soil; in

**SOUTHWEST KANSAS**

FOR FULL PARTICULARS, ADDRESS

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Land Commissioner A. T. & S. F. R. Co.  
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The Kansas City, Fort Scott & Gulf Railroad is the short and cheap route from and via Kansas City to Olathe, Paola, Fort Scott, Columbus, Short Creek, Pittsburg, Parsons, Cherryvale, Oswego, Fredonia, Neodesha and all points in

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To Rich Hill, Carthage, Neosho, Lamar, Springfield, Joplin, Webb City, Rolla, Lebanon, Marshfield, and all points in

**Southwest Missouri,**

To Eureka Springs, Rogers, Fayetteville, Van Buren, Fort Smith, Alma, Little Rock, Hot Springs, and all points in

**NORTH WEST ARKANSAS,**

To Vinita, Denison, Dallas, Fort Worth, Houston, Galveston, San Antonio, and all points in

**TEXAS and INDIAN TERRITORY.**

All passenger Trains on this line run Daily. The Kansas City, Fort Scott & Gulf Railroad line will be completed and open for business to Memphis, Tenn., about June 1st, 1885.

**B. L. WINCHELL, J. E. LOCKWOOD,**  
Ass't Gen. Pass. Agt. Gen. Pass. & Tkt. Ag't.  
General Office Cor. Broadway & 6th,  
Kansas City, Mo.

### The Veterinarian.

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

**DISTEMPER IN COLT.**—I have a two-year-old colt that has had distemper and has the throat swelled; can hardly drink, has a difficulty in breathing, wheezing a good deal, and is running at the nostrils. Will it do to use her at light work. [If you persevere in neglecting the care and treatment of your colt, you will lose her or leave some chronic defect that will ruin her. Apply a warm poultice to her throat, rubbing the throat every day with Caustic Balsam, half olive oil. Give internally, 10 drops of tincture of aconite, three times a day, in a tablespoonful of water. Let her rest; she is not old enough to do any kind of work. Feed cooked food, very sloppy, and steamed cut hay.

**HERNIA—COLIC.**—Have a colt six months old that has a rupture; his scrotum is as large as a man's fist, but it has not been an unnatural size for the last two months. What care is necessary in having him castrated? I also have a mare that is subject to colic. I was obliged to wean the colt last year at two months; after this she seemed to do all right, but this year she does not seem to thrive at all; has a ravenous appetite for food and water. [Your colt being young may, before he is two years old, overgrow the weakness, and when he requires castration there may be no difficulty or danger. Your mare is probably subject to constipation, which causes colic; it is no uncommon result while nursing. Feed laxative food, such as bran and flaxseed, cooked, with salt sufficient.

**SURFEIT.**—Young cow in May last became stiff, decreased in milk, but somewhat recovered. About the middle of September she foundered herself on green corn; is now stiff and mopeish. There is a hard cake on belly in front of udder. [The only way to give your cow relief is to keep the bowels in good healthy condition. Be careful not to allow constipation to set in, as a fevered state of the system is present in all cases of overpowered digestion. Feed scalded bran and flaxseed, with 1 oz. of carbonate of magnesia and a little salt, every evening, but give a warm cornmeal, crushed oats, and bran mash every morning, free of medicine. Rub the stiff parts with turpentine 1 oz., aqua ammonia 2 oz., linseed oil 1 pint, mixed, two times a day. Let the cow have an hour's exercise every day.

**FOOT-ROT.**—Foot-rot, says the Country Gentleman, like smallpox and other eruptive diseases, is highly contagious. What is generally known as "foul-in-the-foot" is not. By confounding the two diseases, many sheep-owners are confused, and their testimony, although honest, would not be definite enough to be reliable. A sheep which has foul-in-the-foot may get so lame that it goes about on its knees, and afterward recover without much care or doctoring. A sheep having the genuine foot-rot never recovers without thorough medical and surgical care. There is a disgusting fetid smell about the genuine foot-rot which is never present in "fouls," and enables a shepherd to distinguish the two instantly. The foot-rot is not infectious in the true meaning of the term. Contributors to the London Farm and Home give these remedies for foot-rot:

I have found spirits of salts and verdigris never to fail, and can highly recommend it.—M. S. C.  
The only certain cure I know of is butter of antimony. I have tried every other known remedy, but this is the only one I can recommend.—E. J. M.  
A very good caustic can be used, made of blue stone dissolved in water—a strong solution is required—and applied by a stick with rag tied round it, in the cleft between the hoofs. This will cure the disease in its early stage.—A. L.

The first step toward cure is immediate removal to dry pasture. Then put the sheep in a pen, catch and turn them up, and pare away all superfluous horn of the foot around the sore. Then apply some strong caustery, such as butter of antimony—this can be done by means of a feather or brush. The sheep, after this is done, should remain in a dry place.

## DR. JOHN BULL'S Smith's Tonic Syrup FOR THE CURE OF FEVER and AGUE Or CHILLS and FEVER, AND ALL MALARIAL DISEASES.

The proprietor of this celebrated medicine justly claims for it a superiority over all remedies ever offered to the public for the SAFE, CERTAIN, SPEEDY and PERMANENT cures of Ague and Fever, or Chills and Fever, whether of short or long standing. He refers to the entire Western and Southern country to bear his testimony to the truth of the assertion that in no case whatever will it fail to cure if the directions are strictly followed and carried out. In a great many cases a single dose has been sufficient for a cure, and whole families have been cured by a single bottle, with a perfect restoration of the general health. It is, however, prudent, and in every case more certain to cure, if its use is continued in smaller doses for a week or two after the disease has been checked, more especially in difficult and long-standing cases. Usually this medicine will not require any aid to keep the bowels in good order. Should the patient, however, require a cathartic medicine, after having taken three or four doses of the Tonic, a single dose of BULL'S VEGETABLE FAMILY PILLS will be sufficient.

**BULL'S SARSAPARILLA** is the old and reliable remedy for impurities of the blood and Scrofulous affections—the King of Blood Purifiers.

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The Popular Remedies of the Day.  
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**OPIMUM HABIT** DR. H. H. KANE, of the DeQuincy Opium Home, now offers a Remedy whereby any one can cure himself at home quickly and painlessly. For testimonials, and endorsements, letters from eminent medical men, and a full description of the treatment, address H. H. KANE, A.M., M.D., 40 W. 14th St. New York.

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## THE MARVELLOUS WEBBER SINGING DOLL.



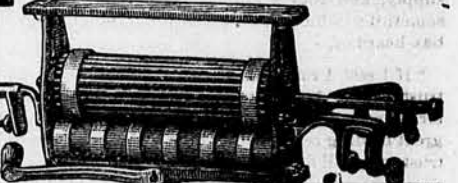
### A Mechanical Wonder.

Last year we first introduced this charming novelty to the children of America and it is safe to assert that no Toy ever devised attained such immediate popularity; fully aware of its merit we had thousands of dolls ready for the Holiday trade notwithstanding which the supply was exhausted early in December, and hundreds of children who came to our store were disappointed. We have been accumulating stock for the past nine months and shall endeavor this year to fill all orders the day of receipt. **The Doll has been improved in every way since last year.** Instead of the stiff German body as in all imported dolls our Doll has an **AMERICAN MADE BODY** with limber joints so that it will sit easily and gracefully in any position. The arm is of **Finest Kid** with separate fingers. These are positively the finest bodies ever put in a doll, they are of graceful and natural shape, and much better and more expensively made than the best imported bodies which they will out-wear many times. The **Waxen Heads** with long hair are of the best French and German make especially for this Doll are as beautiful as life, long hair, beautiful eyes and delicately tinted cheeks. We consider them the finest Doll's Heads ever imported into this country, and that without the **Wonderful Singing Attachment** THE DOLL ALONE IS WORTH THE ENTIRE PRICE. THE SINGING ATTACHMENT is concealed within the body. It is one of the most ingenious inventions of the age. Its shape and location are shown in the right hand engraving. It is a **Perfect Musical Instrument**, finely made, not liable to get out of order and so arranged that a slight pressure causes the Doll to sing one of the following airs: "Home sweet home," "Greenwillow," "I want to be an angel," "There is a happy land," "Sweet bye and bye," "Bonnie Doon," "How can I leave thee?" "A B C Song," "America," "Thou, thou reign'st!" (German), "Frohe Bot-schaft" (German), "Fell Aunt Rhoda," "Hurry a brown," "Yankee Doodle," "Coming thro' the Rye," "God Bless the Prince of Wales," "Grandfather's Clock," "Child's Song," "Last Rose of Summer," "Joyful Message" (German), "Old Folks at Home," "Pop Goes the Weasel," "So many Stars" (German), "Sleep my Child" (German), "When I a little bird," "Cradle's Empty," "God save the Queen." Walking and talking dolls have long been made, but they are expensive, soon out of order and do not afford the little ones half the pleasure and entertainment that our **Wonderful Singing Doll** does, which is the **Greatest Novelty in CHILDREN'S TOYS EVER PRODUCED** and is the most beautiful and appropriate present that can be made to a child. We can furnish three sizes No. 1, 22 inches high, price \$2.75. No. 2, 24 inches high, larger head price \$3.25. No. 3, 26 inches high, our BEST DOLL, price \$4.00. These Prices include **Boxing**. All three sizes are equally perfect and complete, but the larger the doll the larger the singing attachment and better head. Send to any address on receipt of price; fine embroidered Chemise 25 cts. extra. The Trade Address all orders to **WEBB MESSACHUSETTS ORGAN CO., No. 57 Washington Street, Boston, Mass., U. S. A.**

**7 FINE COSTUMES** for these dolls with underclothing, lace trimmed, finely made, \$3.00 to \$5.00 extra.

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For a Holiday, Birthday or Wedding Present, nothing could be more appropriate than this celebrated Combination Chair. The left end represents but one of five articles combined, viz Parlor, Library, Reclining or Invalid's Chair, Child's Cradle, Lounge and Bed. Fifty changes of position. It is simple and durable in construction, while its elegance and comfort is unrivaled. Satisfaction assured. We manufacture Invalid's Chairs on wheels, and Physician's Chairs. [Send stamp for Illus. Catalogue. Mention this paper.] Address: **STEVENS' ADJUSTABLE CHAIR CO., No. 3 Sixth Street, Pittsburgh, Pa.**



The Baldwin apple is a favorite in Ohio. It bears young and seldom misses a season without a crop.

Farmers should not confine their hogs to corn as the only fattening food. Other grain should be given for variety's sake.

In England the average butter yield of a Jersey is from six to seven pounds per week, according to the London Live Stock Journal.

It is thought that the export trade in apples this year will be very light, owing to the fact that because of the full crop in England, prices are lower than here.

In the Liverpool mutton market the carcasses of choice long-wooled sheep sell at 17 cents per pound, while those of Merino sheep command but 13 to 14 cents.

An Ohio farmer has found that a bushel of timothy contains over 55,000,000 seeds, or about eight seeds to every square inch if spread uniformly over an acre of land.

Sweet corn fed to swine will afford a return in pork fully equal to its value in any other direction. The hogs will eat stalks as well as ears, and appear to relish it highly.

Keep your milk-houses well ventilated. Milk absorbs and retains the impurities of the air to an astonishing degree, and every precaution to keep the air pure should be taken.

C. M. Hovey strongly advocates the transplanting of trees and shrubs in autumn, saying that the main reason is because the earth will be in the best possible condition to growth in the spring.

In gathering apples, besides handling them carefully, assort them according to quality, rather than dump them into barrels or piles. Fine apples, well handled, always bring good prices.

The Pittsburg Stockman says the demand for first class seed corn is always in excess of the supply, and that a glutted seed corn market is something which the "oldest inhabitant" never has heard of.

"If I rest, I rust, is a German proverb. "If I trust, I bust," is the American version. The latter proverb does not refer to Phenol Sodique, the great healing remedy, in which if you put your trust, you will find it has not been misplaced.

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**Absolutely Pure.**

This powder never varies. A marvel of purity, strength and wholesomeness. More economical than the ordinary kinds, and cannot be sold in competition with the multitude of low test, short weight, alum or phosphate powders. Sold only in cans. ROYAL BAKING POWDER CO., 106 Wall-st., N. Y.

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I offer my entire flock of high-bred PLYMOUTH ROCKS for sale at special prices. My flock includes many prize-winners and exhibition birds, all of which will be disposed of at a sacrifice.

Also a few excellent BUFF COCHINS and LIGHT BRAHMAS, at bargains.

Write for prices. SANFORD L. IVES, Mound City, Linn Co., Kansas.

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FOR SALE. The most profitable Black Raspberry grown. Plants taken from fine, healthy, bearing plantations. Send for price list, and place your orders early. FRED EASON, Fruit Grower, Leavenworth, Kansas.

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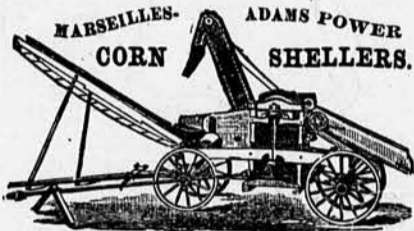
"For Sale," "Wanted," and small advertisements for short time, will be charged two cents per word for each insertion. Initials or a number counted as one word. Cash with the order.

FOR SALE—100 Stock Hogs Inquire of Oakley Farm, west of Washburn College.

FOR SALE—400 Merino and 150 Cotswold Sheep, including 4 Rams (Merino). No wethers except lambs. Perfectly healthy and will shear 7 to 8 pounds. Address CONNELLY BROS., Council Grove, Kas.

FOR SALE—100 Pure Poland-China Pigs, eligible to record. J. W. BLACKFORD Bonaparte, Iowa.

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ONE, TWO, FOUR OR EIGHT HORSE HAND BELT OR GEARED FEED GRINDERS.



Pumping or Power WIND MILLS, ALL SIZES AND STYLES OF IRON PUMPS, IRON PIPE.



SHOULDERS BRASS CYLINDERS AND Riding, Walking and Combined



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## THE MOST EXTENSIVE PURE-BRED LIVE STOCK ESTABLISHMENT IN THE WORLD.

Rare Individual Excellence and Choice Breeding. Constantly Arriving. New Importations.

OLYDESDALE HORSES, PERCHERON-NORMAN HORSES, ENGLISH DRAFT HORSES, TROTTER-BRED ROADSTERS, SHETLAND PONIES, HOLSTEIN & DEVON CATTLE

Our customers have the advantage of our many year's experience in breeding and importing, large collection, opportunity of comparing different breeds, low prices because of extent of business and low rates of transportation. Catalogues free. Correspondence solicited.

POWELL BROS., Springboro, Crawford Co., Penn. Mention this paper.

ROBERTS, DURNALL & HICKS, STOCK FARMS Near WEST CHESTER, Chester Co., Pa. Dutch Friesian Cattle AND NORMAN HORSES PERCHERON HORSES

Desire to call the attention of gentlemen and dealers to their stock as above, confident that they have as fine lots as have been brought to this country, all having been selected by a member of our firm in person, who visited the best herds in Holland; and under the guidance of one of the most experienced horsemen in France; side selections from the best horses in Normandy. Write for Catalogue and any information to JOHN H. HICKS, Box 684, West Chester, Pa.

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# BEST IN THE WORLD. NEW MEAT CHOPPER.

ATTENTION FARMERS!!

FOR CHOPPING Sausage Meat, Mince Meat, Suet, Hamburg Steak, Tripe, Codfish, Cabbage, Peppers, Salad, Scrap Meat for Poultry, &c.

NO. 10, FAMILY SIZE. PRICE, \$3.00.

NO STRINGS OR SINEWS CAN PASS THROUGH UNGUET.

NO. 10-chops 1 lb. per minute, \$3.00  
 " 22 " 2 lbs. " 4.00  
 " 32 " 3 lbs. " 6.00  
 " 42 " 4 for pork only, 10.00

CAPACITY.

The American Agriculturist Sept. Number says, "We have given this Meat Chopper a thorough trial, with most satisfactory results."

Sold by all Hardware Dealers. Send for Terms. AGENTS

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TOPEKA KANSAS

UNDER CARE OF PROTESTANT EPISCOPAL CHURCH.

For girls and young ladies exclusively. Boarding and day pupils.

Seventeen Officers and Teachers.

Faithful maternal oversight for all intrusted to our care.

All branches taught—Kindergarten, Primary, Intermediate, Grammar, and Collegiate; French, German, the Classics, Instrumental and Vocal Music, Elocution, Drawing, Painting, etc.

The largest Music Department west of Chicago and St. Louis. Fall session will open Sept. 18. Send for Catalogue, to T. C. VAIL, Bursar, or BISHOP VAIL, Pres't, Topeka, Kansas.

## Grebe Stalk Rake

### THE GREBE REVOLVING STALK RAKE

Is extensively used in Nebraska, and some in Kansas and Iowa, for raking cornstalks and weeds into winrows for the purpose of burning them, and thereby destroying the seeds of weeds and eggs of insects.

County rights, except in Nebraska, for sale. HENRY GREBE, Omaha, Nebraska.

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Whose Flocks Show SCAB or VERMIN are reminded that

### LADD'S TOBACCO SHEEP DIP

Is guaranteed to ERADICATE SCAB and VERMIN as surely in mid-winter as in mid-summer. Those who have used other Dips with no, or partial success, are especially invited to give ours a trial. Its use more than repays its cost in an INCREASED GROWTH OF BETTER WOOL. Our new pamphlet, 64 pages, ready for free distribution. Send for it.

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