

TOPEKA : BUSINESS : INDEX

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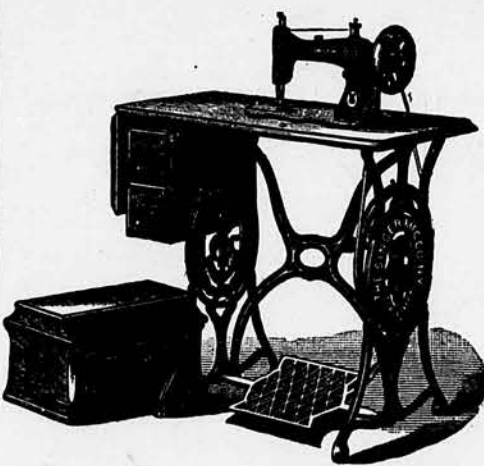
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TOPEKA, - - KANSAS.

It is the official organ of the State Superintendent, containing the monthly decisions of that office of the Attorney General, and the Supreme Court on all matters relating to schools.

It prints and answers the Quarterly Examination Questions of the State Board of Education.

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Means of inter-communication between all points in the States of KANSAS and NEBRASKA.

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Joins the GREAT ROCK ISLAND ROUTE at KANSAS CITY and ST. JOSEPH FOR CHICAGO, and points EAST, and makes close connection with all the leading Railway Lines for ST. LOUIS and points EAST, SOUTH and SOUTHWEST; and with the famous ALBERT LEA ROUTE to ST. PAUL, MINNEAPOLIS, and points in the NORTHWEST.

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It is a line of modern construction, with the latest and best improvements, and traverses the most important portions of the States of KANSAS and NEBRASKA, where there are opportunities not found elsewhere for the Farmer, the Merchant, the Mechanic, the Laborer, the Professional Man, and all classes of business and industrial pursuits.

For tickets, maps, folders and other information, apply to your nearest Ticket Agent, or to

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The Only Line Carrying the United States Overland Mail.

Commencing Sunday, December 4, 1887, baggage will be checked through from eastern points to Pacific Coast, and through sleepers run on all trains between Council Bluffs, Omaha, San Francisco and Los Angeles; also between Kansas City and Ogden on "THE OVERLAND FLYER," saving one day to all California and Oregon points, running from Missouri River to the Pacific Coast in seventy-one hours. Elegant Pullman Palace Car Sleepers and modern day coaches on all through trains. Eating houses under supervision of the company and meals furnished by Pacific Hotel Company, unsurpassed. In complying with the wish of our patrons, night trains between Omaha, Council Bluffs and Kansas City have been changed to day trains. Chair cars to Beatrice free of charge. Third class passengers carried on regular through trains running free family sleepers.

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For further information address J. S. TEBBETS, General Passenger and Ticket Agent, OMAHA, NEB.

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All Coupon Offices in the United States and Canada will sell tickets to Los Angeles, San Diego and San Francisco for this Excursion.

BREEDER'S LOWEST RATES ON ALL NEWSPAPER ADVERTISING OBTAINED THROUGH THE CHICAGO, KANSAS AND NEBRASKA RAILWAY.

Agricultural Matters.

THE ADVANTAGES OF FARM LIFE.

Read before the Farmers' Institute, at Oak Grange Hall, Shawnee county, January 20, 1888, by Mrs. M. E. Clark.

The tendencies to accurate and scientific investigations in regard to those things that are of interest and profit to us as a people, nowhere have a greater influence and are looked into and studied with deeper interest than in agriculture by the average farmer. By the last census it is made to appear that of the 17,392,099 of population engaged in all kinds of industrial pursuits, 7,670,493 are engaged in agriculture. What a mighty influence such a vast number might have in making and in a measure controlling the laws of our land. Society has long been led by those who are not in sympathy with us, or at least who are from a class that have been educated and trained to lead and govern, that it seems almost impossible to break customs so long and firmly established. Yet the farmers of to-day look at the old order of things with disfavor, and are taking steps to bring about a change, let us hope for the better. Labor-saving machines, and improvements in all kinds of farm implements, have lightened the labor of the husbandman, and made that life which was once a drudgery more of a pleasure, giving us more time for sociability and recreation, and for the acquiring of that knowledge which is a necessity in any department of life, but much more so to us as farmers. Compare the lives of the laboring classes of our cities with our own daily lives, and which would you choose? Our time is our own, to use as we see fit, whether we use it wisely or the reverse. Their time is not their own; at the sound of the whistle they must begin their daily toil. They live, work, eat and sleep on time. I do not claim that our lives passed on the farm take precedence over all other occupations, for we know clouds will arise, and we have many disappointments to meet and overcome; but I do assert that we have many advantages which other laboring classes have not. We point with pride to our own agricultural college, located at Manhattan, where our sons and daughters can with a limited expense receive a thorough, practical education, where they are taught innumerable applications of science to agriculture, which helps to elevate and throw a charm around this much abused though noble employment, and I think I can truthfully and honestly claim that it meets the needs of the agricultural class. Every farmer that gives this subject his earnest consideration cannot fail to see the great advantage to be derived from it. From the pioneers of this wonderful land of ours has sprung the noble men and women that have made our land bud and bloom and bear rich fruits, leveled the forest, turned our treeless prairies into fertile acres, and taught their sons and daughters self-reliance, personal independence, sturdy and true. From such homes and training has sprung the farmers of to-day. The progress they have made in the last century is an earnest of their endeavors for the future.

Those who till the soil should depend largely on their own resources for the needs of their families; they should furnish their own bread, vegetables, meat, butter, fruits, and everything that their farms will produce for the comfort of their families, making themselves almost independent of the neighboring cities or villages. Compare our pure, life-giving atmosphere with the murky, stifling atmosphere of our cities. While we drink deep draughts of our

sweet country air, their lungs are filled with all the impurities arising from a crowded population; the coal dust and smoke that hang like a pall over their homes, pollutes the air they breathe, while we gather strength and renewed vitality with each fresh breath of air. Our friends of the cities know and appreciate all these advantages of ours, and as soon as they obtain a competence how quickly they avail themselves of homes in the country, where they can at least spend a portion of their time, and in doing so finding that comfort and ease which seems so necessary to health and peace of mind.

Again, among the means and incentives to improvement enjoyed by farming communities we cannot overlook the associations and annual exhibitions. They are not new, but they prove none the less useful. Their great advantage consists in their adaptation to bring agricultural improvement home to all the people. Then we have our agricultural papers and periodicals which leave little to be desired in that line, unless it might be to place one in the hands of every farmer, for they are devoted exclusively to topics pertaining to farming, gardening, horticulture, in fact, everything that is of interest to us as a class. In our Eastern States the farmers co-operate in various ways to their interest. Last year in eastern Ohio, quite a successful effort was made by running a fruit evaporator. It is needless to go into actual figures; suffice it to say their success more than met their expectations. I might enumerate various other enterprises of like result.

Much has been said in regard to our sons leaving the farms for a precarious living elsewhere, attributing it to the drudgery and lack of attraction in their surroundings. But I look at it in a different light. Our children are endowed with reasoning faculties as are we; their likes and dislikes are as real as our own. If my son prefers a knowledge of any other vocation than farming and ardently desires to follow that particular calling, it would be the height of folly for me to oppose his wishes and insist on his making a farmer of himself when his heart is not in it. To excel in any calling we must put our hearts in the work. Farming needs good, practical men and women, with their faculty of observations keenly alive to note and apply and profit by the experiences of others. Now the winter is upon us and our time is well spent in recreation and social gatherings of various kinds. The Grange offers to all farmers a double advantage, inasmuch as we can and do enjoy both social and intellectual benefits to be derived through interchange of thoughts from the brethren and sisters, proving alike instructive and entertaining.

How we love and delight in nature, and contemplate her works; it enters into our lives and makes our labors seem but a part of one grand drama which is under the control and guidance of one who when here on earth, Himself set us the example and taught us the necessity and dignity of labor, thereby fulfilling a divine command.

About Mammoth Clover.

EDITOR KANSAS FARMER:—You have got me in trouble by stating in the FARMER, that I raised Mammoth clover and might have seed for sale. If I had seed for sale the notice would have been a valuable advertisement for me; but as I have not, please allow me space to publicly answer numerous correspondents. It will save me time and postage, and the answers may be of general interest.

I raised no Mammoth clover seed in 1887. The extreme drouth and hot

weather of the late summer and fall of '86, nearly destroying the old crop; but the seed shattered off in harvesting the crop of that season made a beautiful stand last spring, and afforded an excellent pasture the whole season, going into winter quarters in fine shape. I anticipate a good seed crop the coming season.

Now to answer a few questions of correspondents as to the character and habits of Mammoth clover. Like common red clover, it is a biennial, but from its habit of heavy seeding, I believe on rich land it will prove eternal, the old plants being replaced by new ones from the seed. It only differs from common red clover by growing larger and maturing later, starts equally early in the spring. From my acquaintance with it I consider it superior as a fertilizer, and as a pasture. It matures with timothy, and therefore, I think is preferable for mixing with that standard grass for hay. I have never had any trouble in getting a good stand. Have always made it a point to buy seed direct of the producer, (several times sending nine hundred miles for it) unless I had of my own raising. It is very important to sow fresh, pure seed. I would not pay half price for seed I had any misgivings about.

Sow at the rate of one bushel to six acres. Don't sow with grain. Mow with machine when weeds get to be eighteen inches or two feet high, and repeat the operation if necessary again during the season. Follow these directions and you will succeed, and you need not worry about it.

EDWIN SNYDER.

Oskaloosa, Jefferson Co., Kans.

KANSAS AGRICULTURE.

Address delivered by Hon. A. W. Smith, of McPherson county, before the State Board of Agriculture, January 12, 1888.

Agriculture, the foundation of all wealth and happiness, was instituted by God, when he proclaimed to Adam, "In the sweat of thy face shalt thou eat bread." The first record we have of its application is when the two brothers brought the products of their industry—one from the flock—as an offering to the Lord. From that day to the present, agriculture has been the foundation upon which all other industries rest.

Indeed, it has been truthfully said, that no other industry could succeed, even if it could exist, if it were not for the efforts and the success of the humble tiller of the soil. Hence the agricultural industry becomes the foundation of all wealth, prosperity, luxury and happiness. By it great empires are subdued; cities are built; highways are constructed, and the waste places of earth are made to blossom as the rose.

Every human being, whether he be of humble birth, or of royal blood; whether his abode be in the sod house upon the plain, or in the gorgeous mansion upon the hillside, is dependent upon, and recipient of, its bounties.

The atmosphere in which we Kansans live is redolent with boom, boom, boom. We hear the voice of the modest real estate agent echo and re-echo this magic word. This man, or that fellow is designated as a great boomer. But the man that tickles mother earth with a hoe and causes her to laugh a harvest, is the substantial boomer of the age.

Great as has been the advancement in the modes and methods of agriculture; grand as have been our achievements, there is still a vast field to be explored.

It is to be regretted that we have not reached a higher standard of perfection. Many of the fundamental principles of our industry are still open questions. Diverse theories have always existed,

and they seem to multiply as the years go by.

To my mind the great want of the farmer is a higher practical, agricultural and general education. Coming to this State with very limited means as many of us did; and ambitious to conquer the soil and procure a home and a competency, we have not taken time to think. We must investigate subjects connected with our industry and affecting our material prosperity. Hitherto we have allowed gentlemen of other professions, and other callings to do our thinking for us to too great an extent. Doubtless their advice was well intended, but we can not get away from the fact that in many instances we have paid dearly for it. The farmer should not only have a thorough knowledge of his profession, but all the details of the farm should be looked after upon strict business principles. His methods may not necessarily have all of the red tape paraphernalia of a pension department under the general direction of the high-bred prince of vetoes; but every farmer should have a ledger in which the business transactions of the farm are entered, that he may know at least once in twelve months how he stands with the balance of mankind.

Perhaps there have been more shipwrecks along the coast of our vocation through neglect or ignorance of the details of the farm, than from any other cause. Valuable machinery, through neglect, is allowed to stand out in the elements the year round. Or perhaps the stock is gathered into a lot in the fall with nothing but a three-wire fence between them and the north pole, when a little labor with a few poles and some straw or hay would make a good covering for the machinery, and the same commodities (which are within reach of the humblest) properly arranged will make a good protection for the stock.

In this illustration I have only pointed out a few of the extreme cases of neglect, which, if persisted in, lowers the standard of our calling, and aided by the persistent and ever present 2 per cent. man, leads to bankruptcy and to ruin. Knowledge, care, industry and economy are the elements of success and happiness.

The farmer should have a knowledge of the elements of his soil and its adaptability to the growth of the desired product. Care should be taken in the preparation of the grounds, and the crop should be cultivated with great industry, and harvested with economy. Do the right thing, in the right way, and at the right time, should be the motto of every farmer. Bearing in mind at all times that it is not what we raise, but what we have to sell, that furnishes us our revenue.

The farmer should not only have a good knowledge of his own business, but he should invade the domain of political economy. He should study the principles of government; he should familiarize himself with all the great economic questions of the day, and their effect and bearing upon his industry. In short, he should be the highest type of an American citizen; ambitious to promote his own interests, and willing to help protect other industries.

Let us remember that we cannot get along without the machine; we are not independent of the man of genius. Our prosperity and development depend largely upon the inventor. The world advances by the assistance of all laborers. The inventor does as much for agriculture as the man who holds the plow. I am a believer in the brotherhood of all laborers; and I am a firm believer in the protection of all American products and American labor.

The importance of the agricultural interest entitles it to the consideration of the wisest statesmanship; to the fostering care and protection of the State and general government against the unjust encroachments and exactions of greed and avarice. I hope the day is not far distant when our profession will be honored by having a representative farmer in Washington, with the full rank and power of a cabinet minister, to look after and advance the agricultural interests of the country.

The Stock Interest.

THOROUGHBRED STOCK SALES.

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

MARCH 14.—Sweetser & Odell, Holsteins, at Kansas City, Mo.

IMPROVED STOCK ON THE FARM.

Prepared by Hon. J. B. McAfee, and read before the Farmers' Institute at Oak Grange Hall, January 20, 1888.

I cannot but wish you had assigned a subject of such importance to some one of more time and experience than myself. I do not suppose you wish me to relate what I have read, or what I have heard, but the results of my own efforts in that direction. I suppose it is your desire to make this an experience meeting.

For over twenty years I had considerable experience with common stock, but not with improved stock. In 1880, when I concluded to devote my time and limited means to the stock business, I fortunately fell into the hands of Major Sims, who spent considerable time in trying to convince me of the importance of having good stock to begin with. Laying aside my own judgment and yielding to his, I paid \$100 for a good Short-horn cow, and the same day I bought elsewhere three cows for the same sum. The Short-horn cow's calf, when a yearling, sold for \$125. The other calves at the same age sold for \$18 each. If it cost \$15 each to keep the common cows it left but \$3 gain. If it cost \$25 per year to keep the good cow there was still \$100 gain, or as much gain from one good cow as from thirty-three common ones. I could see no good reason for keeping so large a number to secure the same results. I consequently got rid of my common stock as fast as it was convenient to replace them with good. In five years the calves from the good cow sold for \$505. My next purchase was two fine heifers, which cost me \$520. The first two or three calves from each cow were heifers. From these two cows and their offspring in five years I sold over \$2,000 worth of stock and still have the two cows in the prime of life and worth at least 70 per cent. of their original cost. The one has a calf with her now nine and one-third months old that weighs 845 pounds. It took the blue ribbon at the State fair last fall for the best bull calf under one year old. It had to compete against some of the finest stock from Iowa, Missouri, Nebraska, Illinois, and Kansas. The other cow has a heifer calf eleven months old, equally good, and a bull calf a week old at her heels. Had I bought a half dozen good cows at the start instead of buying one or two each year my returns would have been double as great as shown by the following figures: I paid in full to January 1, 1888, for Short-horn cattle, \$4,685, and have sold \$8,891, and have still on hand at a low estimate \$3,500 worth, making in all \$12,391, or \$7,756 for feed and labor, leaving a net profit after allowing for feed and care of about \$5,000. The reason the whole herd does not show such good results as the first three referred to is because I bought quite a number at different public sales and sold them soon after, realizing but a small profit from them.

Two thousand dollars invested in ten or twelve cows, or even a smaller number, and one good bull, if properly handled and well cared for, will return a net gain annually of from \$1,000 to \$1,200. In 1882 I raised eight steers—common stock—kept them two years, and after full-feeding for about three months sold them at \$42 each. The Short-horn bull calves the same year as yearlings averaged about \$125 each, and

the heifer calves about \$150 each, some selling for over \$200.

If a farmer has but \$1,000 to invest in stock, much better put it in five or six, or even a less number of good animals, than into forty or fifty common cattle. His gross returns will be as much from the few good ones as from the greater number of common stock, and his net returns will be 50 per cent. and upwards on the good stock, whilst on the common usually less than the value of food and care given them. The time was when common stock could be turned loose on the prairie to care for themselves, and after three or four years they and their increase rounded up and a handsome profit result from the investment. Those days are past. The range is gone. Land has become valuable, and to get any reasonable return from it you must put on it the best of stock and give it the best of care. Much greater net gain from five head well cared for than from fifty head left to care for themselves.

My experience in raising horses has been mostly with high-grade mares and full-blood horses. At this time I have four very fine high-grade spring colts, and one full-blood filly that will sell for more than the other four. She was seven months old January 5, 1888, and weighed 805 pounds. I will sell the grade stock as fast as I can do so and stock up with full-blood Clydesdale mares. Will hereafter pursue the same course with horses that I have heretofore done with cattle.

In conclusion let me ask—please don't compare the results of my labor with stock—well sheltered and well cared for, with many others who have started with equally good stock, but sheltered them behind barbed wire fences, in nothing but stock fields, and then doubt the results.

A Case for Dr. Holcombe.

EDITOR KANSAS FARMER:—I just lost a fine filly, coming four in the spring, whose case I wish to refer to the State Veterinary through your columns. Six weeks ago, while trying to lead her into the stable she got stubborn and pulled back, striking her head sideways quite hard against the door-frame, which in a few moments raised a bunch nearly as large as a hen's egg above the left eye. The lump never entirely disappeared, but I did not notice any evil results from it. Her disposition was naturally vicious and domineering to other horses. A few days ago we noticed her a little ill-natured, threatening to kick several times while we were passing behind her. The next morning, not noticing anything wrong, we turned her out with the other colts and cattle as usual into the timothy, clover and stalk pasture. We soon noticed her kicking and squealing rather unusually loud, but it being very cold we attributed it to no other cause. She remained in the field until 4 p. m., when she came into the yard with the other stock, and she soon showed signs of being desperate—kicking, squealing, and biting at any object, person, or animal that chanced to come in her way; then after making a dart, she would walk slowly a few steps, then stop in a sort of a stupor, like a very sick horse, dropping her head below the level of her shoulders, with eyes partly closed. Then, after a few minutes would seemingly arouse, stare intently, twist her tail, turn partly around, something like a horse with the colic; then with mouth wide open would start again as if bent on killing the first object that she might come in contact with. After making a few such passes she left the yard and ran nearly half a mile and stopped and lay down as if to roll, but I think never rolled over. After lying

a little while she got up and walked off. The third time that she thus lay down she was very close to the wire fence and got her head under the lower wire, and in getting up crawled through under, she then traveled about another half mile, when a neighbor, upon seeing her, went out and took her by the halter, thinking to lead her into his stable; meanwhile she bit his arm. He let go the rope and she went off some fifteen or twenty rods, then fell headlong and in a few minutes expired. In that position she lay all night. The next morning quite a quantity of cream-colored and bloody corruption had run out of her left nostril. There was quite a disagreeable odor about her head. Upon opening her head we found her nasal cavities full of clotted blood clear up to the brain, but the brain seemed quite clear to all appearance. And upon opening her body I found large quantities of blood about her liver, heart and lungs, but none among the entrails. The flesh was clear as of a butchered beef. I forgot to state that afterwards, while looking over the field I noticed a great many places where she had pawed the snow in a heap by turning short around all the time while pawing. Also, that she had pawed more than usual in the stable during the night. Although she pawed some every night.

I have come to the conclusion that the cause of her death was mad staggers. Some think it a case of hydrophobia.

Now, what is your opinion?

J. FULCOMER.

Belleville, Republic Co., Kas.

Get Rid of the Middlemen.

A friend sends a printed report of an interview with Col. W. F. Cody—"Buffalo Bill"—in England. We make a few extracts. They are sensible.

"In Chicago there exists a powerful ring of cattle-trade monopolists. They are known as the syndicate of cattle commissionaires. They keep themselves well informed as to all movements of the producers; they know exactly how and when certain lots of cattle must be disposed of; they then proceed to rig the market and the ranchmen find themselves at the mercy of these men. The producer cannot afford to hold his stock, and, moreover, he has no means of doing so. His cattle are grass-fed and cannot be corn-fed; therefore the producer must sell in a very few days or lose in weight. Such a ring can and should be broken. The producers are strong and powerful enough to assert themselves, and they will undoubtedly do so by combining and by killing their beasts at home. There is one very strong point I would like to make in reference to this. Look at it from the sanitary point of view. Take a steer on its native heath, full of life and health, in good condition and pure in blood; again, take a steer which has made a long journey, either on the road or by rail, see the weary-worn look, the feverish eye and tongue, the blood heated, and the beast half maddened by excitement. Your common sense will tell you that the animal killed in the healthy state will make better and more healthy beef than the feverish, hunted steer as he reaches the slaughter-houses in Chicago. Let the animals be slaughtered on the ranches, packed cleanly in refrigerator cars, and shipped to their destination without being mauled about by the Chicago commission handlers.

"To that large body of men who are interested in ranches and are pretty anxious regarding the outcome of their speculation I would say: Hold on, and within three years it will bring you out. Although beef will not be at the same

price it has been you will have the finest business in the world, because they are going to have a market right at home. The cattle in the Indian Territory have been disposed of or located elsewhere. Texas beef, in the face of the superior beef produced on the Northern ranches, has depreciated in value. The Northerner is going to be looked to for beef hereafter. The man who owns a Northern ranch is a producer, and I see a prospect of the producer controlling the market instead of the middlemen. He will soon not be willing to take any price that may be offered him by the ring. I would say to the cattlemen that they are the proper persons to control the market, and not the middlemen who sell on commission. The producers are strong enough to break that ring, and they will do it."

The Hair of Horses' Legs.

The importance attached to the hair on the legs of draft horses in Great Britain is a constant source of surprise to the average American. Here the question of absence or presence of hair and its quality on the legs of Shire or Clydesdale horses is looked upon as of importance only as it tends to prove or disprove the purity of the blood of the animal. And it is undoubtedly true that if the Shire horses, and Clydesdales as well, could be bred in this country or England with legs as destitute of hair as are some other breeds, it would add greatly to their popularity in America. It is rather amusing to see a recent issue of the Norwich (Eng.) *Mercury* discourse gravely on the possibilities of producing good Shire horses outside of the Fen districts, and alleging as the principal point in the argument that it is doubtful if sufficient feather on the legs can be produced elsewhere! *Agriculture*, a paper published in London, combats the idea of the Norwich *Mercury* that good Shire horses cannot be bred outside of the Fen districts, but proceeds to argue that the hair can be grown just as well elsewhere as on the flat lowlands of the fens. Hair, hair! appears to be everything with our British cousins in judging draft horses. They argue that the presence of an abundance of feathers on the legs indicate hardness and firmness of texture of the bone; but how is it about the Thoroughbred? These horses are the cleanest-limbed specimens of the equine race in the world. No animal of the horse kind has a bone of finer texture; and yet no animal of the horse kind is so characterized by the absence of long hair on the legs. This ought to settle the question of hair as an indication of the quality of the bone once for all. Here, upon our muddy country roads, with our frequent sharp and sudden freezes, the long hair on the legs of the Clydesdales and Shires is generally regarded as a nuisance. These breeds are popular here; but this popularity is independent of and in spite of the long hair upon the legs which characterize these breeds, and, as before remarked, they would doubtless be even more popular than they now are if the hair could be bred off.—*Breeder's Gazette*.

American Draft Horse Progress.

It is remarkable how rapidly we are becoming educated up to the heavy draft horse. Twenty years ago almost everybody then said the imported draft horses were too big, and as for the grades they would be useless. Now we can't get the stallions large enough for breeding, and the grades are best appreciated by their large size for the city streets, and sell for prices that awaken the envy of the light horse breeders.

The city markets want all our high-grades and are willing to pay for them. The price is a secondary consideration

when they can find the extra heavy high-grades. The demand for them is increasing faster than the supply. As the city traffic increases, the merchant desires to increase the size of his wagon and horse as well. The wagon-makers are making heavier wagons, the harness-makers make heavier harness, and one big heavy horse does the work of two horses of twenty years ago.

Our farmers, too, are using their fine draft mares to work to remarkable advantage, and we will in a few years more require a team of full-blood drafts on the farm in America, as they have for ages on the farms of Europe. What would the English or French farmers think of trying to plow with a pair of our little American scrubs.

Many jumped at the conclusion that the big draft horses could not trot or travel on the hard roads without being all stove up, yet we have the practical example of 12,000 full-blood draft horses on the stone-paved streets of Paris, driven in a sweeping trot all day to those immense double-deck omnibuses, as only a Frenchman can drive, and these horses have an average life of over six years of this work; many of them twice that long.

American teamsters and American farmers are fast progressing with this heavy horse interest, and we will only stop when we get our city teams well supplied with the best high-grades as heavy as the full-bloods of Europe, and our farms well stocked with the full-bloods and high-grades to raise these popular and profitable big horses.

The draft horse enthusiasm has firmly taken hold in our Western States. Our importations of draft stallions are increasing every year, and the demand grows year by year, and the great draft horse interest is rapidly bringing wealth and prosperity to our country and gives us the world for our market as far as we can get the European size with the American style, which opens up to our American horse breeders such a bright future.—*Bloomington (Ill.) Pantagraph.*

A Ruined Life

is often the result of wasted opportunities, or failure to take advantage of the good chances offered. Those who take hold of our work, make \$1 an hour and upwards. We start you free, and put you on the highway to fortune. Both sexes, all ages. No special ability or training required. You can live at home and do the work. After you know all, should you not conclude to take hold, why, no harm is done. Those who are enterprising will learn all, by addressing Stinson & Co., Portland, Maine.

Forty-three Hours and Fifty-five Minutes.

The above is the time made between Kansas City and New York by the Wabash Western railway, the inaugurator of fast passenger trains from Kansas City East.

The New York and St. Louis limited train, leaving Kansas City at 9:45 a. m. via Wabash Western railway, is still the only fast train to New York.

The so-called fast trains of other lines do not make the time of the Wabash Western by several hours.

Are You Going South?

If so, it is of great importance to you to be fully informed as to the cheapest, most direct and most pleasant route. You will wish to purchase your ticket via the route that will subject you to no delays, and by which through trains are run. Before you start, you should provide yourself with a map and time table of the Gulf Route (Kansas City, Ft. Scott & Gulf R. R.), the only direct route from and via Kansas City to all points in Eastern and Southern Kansas, Southwest Missouri, and Texas. Practically the only route from the West to all Southern cities. Entire trains with Pullman Palace Sleeping Cars, and Free Reclining Chair Cars, Kansas City to Memphis; through Sleeping Car, Kansas City to New Orleans. This is the direct route, and many miles the shortest line to Little Rock, Hot Springs, Eureka Springs, Fort Smith, Van Buren, Fayetteville, and all points in Arkansas. Send for a large map. Send for a copy of our "Missouri and Kansas Farmer," an 8-page illustrated paper, containing full and reliable information in relation to the great States of Missouri and Kansas. Issued monthly and mailed free.

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E. P. & T. A., Kansas City.

In the Dairy.

BUTTER-MAKING ON THE PLAINS.

The McGrew ranch is a butter factory. This seems odd to those who have formed the impression that the ranches of Arizona are the homes of cowboys, and the only time when the cattle of the ranch are assembled is at the annual "round up." There are exceptions to this rule of growing cattle in a wild sort of a way, where the herds feed first upon one area and then move on to another, passing through the grassy valleys like a locust plague, leaving nothing behind but a seemingly barren desert.

The location and water facilities of the McGrew ranch were pointed out in a previous article, and it only need be here repeated that the well-watered gulches of a secluded mountain range, with the grassy approaches to the same, furnish a continuous supply of forage for the herd located here. The roving herds would gladly come in and share this choice feed, but they are excluded by the absence of any water in this vicinity not under the control of the owner of the ranch. A water right is of equal value with a patent from the government for all the land that depends upon such a water supply.

The buildings at the ranch consist of a small house, twelve by twenty-four feet, a separate kitchen, a milk-house, a lean-to shed, a small horse stable, and largest and most conspicuous of all, the corral. The house is of pine lumber brought here at a cost of seven cents per foot. Lumber is high in this timberless land and houses are small for more than one reason. People can live out-of-doors the year round, and a house is more for the name of the thing than for many of the conveniences of ranch life. The house is divided into two equal-sized rooms. The front room is the sitting room, reception room and parlor combined, and an extremely cozy place withal. The wall is neatly papered, the labor of putting it on being done by the mistress of the house. Paper-hangers in Southern Arizona are as scarce as the buffalo on the plains, but not for the same reasons. The second half of the house is the sleeping apartment, which is arranged with all of the needed conveniences for living in this warm climate. Small as the house may seem to the reader, it is large enough to make two people a comfortable home and furnish room for two visitors over night, as the writer and his wife can testify. The reader must remember that the meals are "taken out;" that is, the kitchen and dining-room with its lean-to shed and store-room are apart from the house, and nearly equal to it in size. In this way any of the odors arising from cooking food are not filling the house two or three times a day.

But the building that most interested me and the one that seemed the greater surprise in this far-away land was the milk room. This is not built of lumber as are the main house and dining apartment, but is constructed of adobe. It is, in short, a mud house, but one of the neatest of its kind I have seen. It is about twenty feet square and fully ten feet high, with a flat roof of boards. This roof is double, that is, has an air space of nearly two feet between the two roofs. This is found necessary to prevent the room from getting heated above the desired temperature during the long cloudless days of summer. The adobe earth for the construction of the building was found close at hand. This stiff clay is wetted up with water until it is thick mud, and after stirring in the necessary amount of

dried grass, it is thrown into moulds six inches wide, a foot long and three inches deep. These bricks are dried in the sun, and are soon ready to be laid into the wall. Some walls are constructed of a single brick in thickness, but the better adobes, like the one under discussion, are at least two bricks in thickness with a filling of clay and tie bricks between. Such a wall will stand for centuries in a climate where the rains are few and the frosts are comparatively trifling. The corners are the most exposed, and sometimes are knocked off or worn away to a curve by the rains. The portion of the wall that suffers most is from the earth's surface to a height of two feet.

Within the milk house are shelves along one whole side for holding the large pans of milk. The opposite side of the room is occupied with a large churn, and one of the latest improved butter-workers. A stove stands in the center during the colder part of the year, in which a slow live-oak fire is kept burning for heating the room to the desired temperature.

At one side of the adobe creamery is a lean-to shed, also made of clay bricks, in which the herdsman makes his headquarters. It also contains the various saddles, lassoes and other paraphernalia for herdsmen. Close by is the corral in which the cows are driven to be milked. The time when we visited the ranch was not the best for grazing, but a fresh cow is frequently brought in even in February. The young animal may be born three or more miles away and far up in one of the mountain gulches, so that it is quite a task upon both the strength and the patience for the herdsman to bring the new accession home. By having the time of increase extended, the ranchman is able to have a more even supply of milk throughout the year. This is quite necessary, because his market is a local one. All the butter he can make is sold in Tombstone, a small city twenty-seven miles away in the valley and within sight from any part of the elevated ranch.

Mr. McGrew told me that he found ready customers for all the butter he could make at fifty cents per pound the whole year through. His reputation is already so good that he could dispose of much more than he can produce at the same price, but a man who is willing to risk his all, life not excepted, among cowardly, treacherous Indians, is worthy of a good price. For weeks and even months the housewife was obliged to live in Tombstone for the additional safety the city gave from the Apaches, then upon their war-path, while Mr. McGrew and a force of armed men carried on the operations of butter-making at the ranch by day, and slept on their Winchesters by night. But thanks to the wise policy of Gen. Miles, the hostile Indians are now all removed and peace reigns among the mountain fastnesses which for years echoed with the deadly musket fired from some safe hiding place.—*Country Gentleman.*

Oooley System.

Prof. L. B. Arnold, at a recent meeting of the New York Dairymen's Association, said:

"Previous to the holding of the Bay State Fair in Boston last fall, no public exhibit of butter had ever been marked as perfect by its judges.

"At that fair one sample was so marked and three more were placed in that rank at the dairy fair in New York last spring.

"These are the only instances of the kind ever known.

"There is a lesson in the history of these samples. All were made in the same way. The cream was raised by

intense refrigeration, the milk and sweet cream kept excluded from the air, and so cold as to prevent any advance towards souring or ripening until enough was obtained for a churning. It was then warmed to the churning temperature and kept frequently and thoroughly stirred till acidity was apparent."

Returns from seven co-operative creameries in Connecticut, for eleven months of 1887, show the prices of their butter to have ranged from 22½ to 25½ cents a pound—amounts realized by the farmers. In every case the skimmed milk was left on the farm, and the amounts given are the net prices actually paid to the farmers for the cream alone, after deducting all expenses, including interest on the capital and provision for a sinking fund.

One Fact.

Is worth a column of rhetoric, said an American statesman. It is a fact, established by the testimony of thousands of people, that Hood's Sarsaparilla does cure scrofula, salt rheum, and other diseases or affections arising from impure state or low condition of the blood. It also overcomes that tired feeling, creates a good appetite, and gives strength to every part of the system. Try it.

Early maturity, early training and early pushing have found early graves for some of the best-bred and most promising horses in this country.

Sell the culls if you have more horses than you want to winter over. They will net bring in quite so much money, but you will have better teams in the spring.



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Correspondence.

About Correspondents.

EDITOR KANSAS FARMER:—Looking over my files of the KANSAS FARMER, during the past week, I noticed the following names among the list that contributed to the FARMER in 1875; A. G. Chase, a former editor of the FARMER; James Hanway, whose name at that time, appeared more frequent than any other correspondent, and I may add, whose articles were generally well written and readable. I suppose most every reader forms some kind of an idea in their imagination of the author's appearance, and if a farmer, how the farm home looks, its surroundings, etc.; at least, this is the case with myself. I had pictured out in my mind from what I had read in Judge Hanway's articles on farm topics, etc., about the author, his personal appearance, how his farm home was situated, and all about it. So when W. W. Cone, a special correspondent of the FARMER, was at my place, among other special inquiries was one about Judge Hanway. Mr. Cone gave a description of his personal appearance and of his farm. He said: "between the public road and his house he had a hog lot." This is not written with any intention of casting a reflection whatever on Mr. Hanway, but simply to illustrate the old adage of the difference between "Preaching and practice."

A few of the following still write for the FARMER: Wm. Plaskett, Samuel Sinnett, C. W. Johnson, W. W. Tipton, F. D. Coburn, U. Cameron, R. K. Slosson, Prof. E. M. Shelton, B. C. Driscoll, Prof. Hay, F. Wellhouse, H. C. St. Clair, Prof. F. H. Snow, John D. Knox. The foregoing list of correspondents and the articles on the subjects they handled, will compare favorably with the same in any other agricultural journal I am acquainted with.

In this connection let me say, the Home Circle then, as it is now, was an interesting feature of the FARMER. The present corps of correspondents of the KANSAS FARMER, including the Home Circle, for home talent and non-professional writers, is not excelled by any other similar publication. During twelve consecutive years, seldom missing a number, I have read the FARMER, and can truly say the experience of the local correspondents has been of great benefit to me. Through all these years I have read their communications with increasing interest.

I do not wish to criticize any one, but why not sign your real name and postoffice? However, if you should happen to be a lawyer, preacher, or doctor, or of any other profession, there is no absolute necessity for adding an abbreviation to your name, such as John Smith, "D. D." or "M. D.," but simply "John Smith" will answer all purposes, and save the typesetter that much unnecessary labor, and deprive the editor of one broad smile. Wishing the KANSAS FARMER the success it richly deserves, its editors all the happiness earth affords, and when your editorial labors are ended and have answered the last call for "more copy," upon the presentation of your credentials, be accorded a pleasant interview with the Master above. May you, both ladies and gentlemen, who contribute to the columns of the FARMER—may you live long, and may your shadow and your articles never grow less.

G. W. BAILEY.

Wellington, Kansas.

From Russell County.

EDITOR KANSAS FARMER:—Having been a resident of this county for eight years, have had a chance to note many things of interest, both by experience and observation. When I landed here from the east, I found many things very different from that to which I had been used. The country was all new, very little land in cultivation, and most of the rest was covered with buffalo grass. Most of the government land was held by a floating population, always ready to sell out and curse the country. We were twenty miles from the nearest railroad station; many of the small streams were dry the greater part of the year, and many of the settlers had to haul water, in some instances, as far as three miles; the seasons were adverse to agriculture and horticulture. But now the tables are turned, the country is settled up, nearly all the government land is taxable, and nearly every section of the

railroad lands are sold. There is a large area of land in cultivation and thousands of acres fenced and used for grazing. The blue-stem grass is fast taking the place of the buffalo grass. We have better distribution of the rain and consequently better crops (the past season excepted), but reports show we are not alone in failures. The country is now filled with those who intend to stay and make for themselves homes. We have a railroad and telegraph line in our midst, viz: the S. L. & W. and the A. T. & S. F. have almost graded so near, that when finished, we will be in reach of two lines and two, of four stations, in one day. All the streams run the year round and I do not know of a settler who has to haul water. For the past three or four years horticulture has been pushed forward very rapidly by a majority of those who own land. There are a great many young, thrifty, growing orchards and groves of artificial timber, and the country begins to look and be like home. This is a good place to raise small fruits; those who have tried have all they want to use, and some to spare. There was a bountiful crop of peaches last season. Young timber, when treated decently, makes a wonderful growth on all kinds of land. I have a small grove of five years, growing from seed and seedlings set 8x8, which almost shades the entire ground; have nineteen kinds of forest trees all growing and doing well.

A. WINCHESTER,

Bayne, Russell Co., Kansas.

Saw-Logs on Upland Prairie.

EDITOR KANSAS FARMER:—Among the papers we went to prize as old-stand-bys, and not to be cast aside, are the *American Agriculturist*, *Rural New Yorker*, and the *Prairie Farmer*, each of which has a special value peculiarly its own, giving points and hints that we should be sorry to be deprived of. But to the tiller of the Kansas soil, the KANSAS FARMER is of far more value than all of these put together. However well these may be adapted to their several localities and mode of culture, they in a great measure fail to reach the wants of the Kansas farmer. While our home journal as compared with these is but plain and unpretentious, we esteem the honest, homespun KANSAS FARMER, for its plain spoken practical common sense in dealing with all matters and subjects pertaining directly to Kansas and, Kansas agriculture in particular. The practical letters, essays, and more formal addresses by the practical farmers, stock-raisers and horticulturists, published from week to week in its columns, are invaluable.

Up to the present, the stock in this region is doing exceptionally well, considering the fact that we have little or no grain to give them. The late fall pasture was the best we have known for thirty years in Kansas, taking all stock into the winter in very fine condition. The season, though unusually cold for a time, has been on the whole, rather favorable to stock on account of there being but little rain or sleet. We were favored especially, in having excellent tame grass pastures of clover, orchard grass, timothy and blue-grass, to carry the stock up to the last of December, since which time we have been feeding tame and prairie hay, in alternation. The only difficulty met with is a scarcity of water on account of the ponds, streams, and even springs and shallow wells freezing or running low. Our wind-breaks planted around and across the farm and stock yards and feed lots, serve to protect the stock in a great measure from all storms and blizzards, coming from whatever quarter they may. This matter of timber-belts, we find of no small importance in protecting the tame grasses in winter and the fruits and all other farm crops as well. All our fuel, fence posts, and all else in that line have been gathered from timber planted and grown on the farm, for more than fifteen years past. We have found no trouble in growing alf these. Parties from Indiana and Illinois, seeing our tame grasses the past season—over one hundred acres,—pronounced them, without exception, the finest they had seen anywhere. We have forest trees of less than twenty years growth that girth from five to seven feet, and one more than sixty feet high—saw-logs, in fact, growing on upland prairie. Our orchard has netted us an average of a hundred dollars an acre for the past eleven years. It was put out some eighteen years ago. We propose

to plant out some twenty acres to fruit trees next spring, and to seed fifty or more acres to clover and other tame grasses. We have found these to pay better than grain.

The little wheat that was sown last fall looked well up to the time it was snowed under. In boring holes for fence posts in November we found the ground quite moist to a depth of two feet or more, which we think, augurs well for a good crop the coming season.

We practice a mixed system of agriculture and find it gives one a continuous, profitable employment the year round, and if rightly and judiciously carried out, a continuous income as well. W. MARLATT.
Bluemont farm, Riley Co., Kas.

High Tariff and Protection.

EDITOR KANSAS FARMER:—I was somewhat amused and considerably aggravated at A. J. Grover's lecture on "War Tariff," as he styles it. I do not see how he or any other thinking or reading man can make such charges, as he does, against the tariff policy of the government. Does he not know that the reduction of the tariff on wool ruined four out of five western sheep men? Men who went into the sheep business eight and ten years ago in this country made money as long as the tariff was let alone, but as soon as the tariff was reduced the wool did not pay the expenses; therefore they simply had to retire and live on the interest of their experience, which in some cases, was considerable. Mr. Editor, I am not talking from hearsay on this sheep business, but from sad experience, and for figures, if he wants them, let him go to the market reports of eight and ten years ago, when we had a high tariff on wool, and also of to-day, when we have a reduced tariff.

He also speaks of the woollen mills being closed or running on half time, or bankrupt. It is simply because the cranky free commerce fellows are always tinkering with the tariff, and reducing the tariff on manufactured goods as well as on wool, which enables foreign manufacturers to put their goods on the American markets cheaper than they can be manufactured at home, even if there was no duty on foreign wool.

Then he is not satisfied with ruining two of the best industries of this country, viz: sheep-raising and woollen manufactures, but wants to turn in free ready made clothing, boots and shoes, hides and leather, iron and steel, lead, tin, salt, sugar, crockery, earthenware, cutlery, blankets, flannel, woollen yarn, cotton yarns, cotton cloth, lumber and every other article of prime necessity? I suppose he means by articles of prime necessity, such articles as tobacco, whisky, and genuine Dutch Ben, including foreign dynamite and the cranks to use the stuff. I claim this is a country for American people and American products, and I deny the right of any person whether foreign or native, to run American industries and products in the ground (as some railroads do their tracks when they can not get bonds to build one).

With regard to the surplus, I claim that if the government paid its just debts to the soldiers who fought to make this one of the greatest, if not the greatest nation in the world, there would not be so much surplus in the treasury, and there would be less suffering among the poor soldiers who spent the best part of their lives trying to save their country, and who are now not able to do a good day's work. Some of our revenue reformers would take away the last nickle they had left and give it to some foreign country for their shoddy goods.

Then, when he says that Wall street bankers and capitalists are in favor of "War Tariff," as he calls it, he is simply mistaken, or else the public newspapers on both sides have lied about it. Have not these same "Wall street" men been trying to break this tariff, so that the government would be unable to pay these bonds at maturity, so that they would have a safe investment for their money?

Then, when he comes to bring in ship-building as being totally destroyed. Probably it is; but the reason is, that we had no use for them, as American capitalists can make more out of their money by investing in railroads and such like, which is not affected by the money savers at the head of the reform movement. Reform is all right in its place; but when any man or set of men want to reform all the money we have

in America across the Atlantic, I think it is time to call a halt.

Does not A. J. Grover know that by protecting American industries he is protecting American farmers and laborers? What good would it do farmers if they could get their woollen clothes free of duty if they could not get any one to buy what wheat, corn and stock he has to sell. But then he may say the farmers are not protected. Does he not know that whatever protects the manufacture causes the manufacturer to employ more help and pay better wages, and whatever laborers get for their labor four fifths is expended for their eatables, and that certainly goes to the farmers. What if the farmer does pay four or five dollars for a pair of boots, he does not mind it when he gets six or eight cents per pound for a hide he has to sell. I think we would be better off if we had more Sam Randall's and Pig Iron Kelley's in Congress than there are now. I am yours for high tariff, and protection to American industries, abolishment of national banks, and for government money, and postal telegraph.

Kinsley, Kas.

H. HIXON.

Easily Understood.

EDITOR KANSAS FARMER:—No doubt there are those who will think it presumption on the part of a woman to be interested in or comprehend, or express an opinion relative to the tax and tariff problem. It appears to me that politicians, for political purposes, have literally buried this problem in a rubbish of arguments that when reduced to its simple or primitive form, any thoughtful mind might understand, and it might be, prescribe a remedy; and further, that any thoughtful mind should, if independent of party prejudice, be able to resolve it into its simplest form. We might discuss this taxation question until doomsday and it will effect no radical relief so long as there is a large per cent. of ignorant voters, who will sell their votes to elect unprincipled men to represent us. We, the American people, voters and women, are the slaves of this ignorant majority vote. The time is coming when a national political school is made a necessity, and every voter will be required to present a certificate of intelligence before being allowed to vote upon questions involving the public weal or woe—his own as well as his neighbor's. If we would seek to remedy the present ruinous system of taxation, we must look to the forces that control them. For the most illiterate and immoral class among the American people are its sovereign ruler; their votes are made, bought or sold, like any other thing that is made; it is the lever used by corrupt political parties to secure the balance of power. So long as corrupt political parties are in power, will this majority (insensible) vote be utilized in this way. If you would have a pure stream, cleanse the fountain head. We, the people, elect to serve us these government officials; we are taxed to support them. These government officials have finally resolved themselves into a machine, and the machine is on a down-grade, taking the people with it. Better smash it before it smashes us. They howl high tariff, low tariff and no tariff, and all the time the consumer, be he rich or poor, is paying the bill. Be it direct taxation on home manufactures, or indirect tariff, as on foreign imports. The foreign importer collects his revenue for our government from the consumers, (our people) who buy his goods. It is taken from the general circulation and massed in the public treasury. At the same time our home manufacturers under the mercenary impulse, increase the price of their own similar productions and we pay, too, the revenue to them. So, in order to protect home industries, we pay revenue on both home and foreign produce, and one class, the consumer, is made to suffer to enrich the producers, whether home or foreign. Not only this, but the mass of the consumers are the middle and poorer class, this ruling majority, which groans under its self-imposed burden. If our home industries cannot produce these necessities as cheap or cheaper than the foreign importations, better cut off the foreign produce than exact this surplus revenue from the people, which is not needed by the government and goes to enhance the wealth of the manufacturers. Give us, once more, the spirit that instituted the old Boston Tea party. American products for Americans first. The same can be said of sugar.

Who pays the internal revenue on liquors? Not the brewers, but the victims of its soul-destroying influence—blood money. The taxation upon liquors excludes the small dealers, increases the trade of the larger, and at the expense of the consumer—I should have said sacrifice. Tobacco also, that air-polluting nuisance, should be relegated to the wigwam of the primitive Indian, who made it his emblem of peace, the only humane use it ever had. In conclusion, when our consumers are called upon to protect home industries, they must bear in mind that protection signifies millions of dollars. We suggest that it be appropriated to orphan asylums and hospitals for the victims. Will our editor give us the George system of taxation?

Mrs. M. J. HUNTER,
Concordia, Cloud Co., Kas.

CREAM OF A WEEK'S NEWS.

Several Arkansas train robbers captured.

Forty vessels were caught in the ice of Newport, R. I.

Heavy storm reported throughout the Eastern and Middle States.

War clouds are gathering over the line between Russia and Austria.

Nearly ninety persons were killed by a coal mine explosion near Victoria, B. C.

Several railroad companies have adopted a 2-cent rate per mile for passenger traffic.

General and President Diaz, of Mexico, is a candidate for re-election, with the tide in his favor.

Colored people are making a move toward asking that a national emancipation holiday be named.

The "carload lot" question is being considered by the inter-State commerce commissioners.

The Massachusetts House of Representatives, by more than two-thirds majority, passed a resolution to submit to the popular vote a prohibition amendment to the constitution.

A negro emigration from the United States to the Argentine Republic, S. A., is expected to commence soon. Associations are forming at many places in the Northern and Western States.

M. Genadius, the Greek minister at London, has been ordered to proceed to Washington immediately and to spare no efforts to induce the American government to abolish the duty on currants.

Three colored men were taken from the jail at Plymouth, N. C., and shot to death by a mob of white men. The victims had been charged with murdering a pedlar and were imprisoned awaiting trial.

The new Captain General of Cuba is carrying things there with a high hand. A dispatch says that although he has been in the office but three months, his administration is reeking with crimes of every description.

The Ohio Wool-Growers' association met at Cleveland and adopted resolutions declaring that the tariff of 1867 is necessary to the protection of the wool industry, and opposing the nomination of any candidate for Congress or President who is not publicly pledged to favor and support protective duties to the extent aforesaid. The resolutions favor abolishing the internal revenue tax on tobacco.

The New York Sun says: "The sugar trust gave another evidence of its power yesterday when it ordered Moller, Sierck & Co. to close their refinery. One of the firm said that the shut down would not occur until the raw sugar on hand had been used up. In the meantime the firm notified its employees to look out for other jobs. This is the fourth sugar company that has been closed since the sugar trust was perfected in this city."

From a Chester, Pa., dispatch it is learned that a new fuel-saving device was publicly tested at the rolling mills there. The process is simply the spraying of fine coal, reduced by the cyclone pulverizer to a powder, into a chamber attached to the furnace in which the combustion is so perfect that all the waste hitherto occurring in smoke and ashes is entirely obviated. The general result showed a saving of between 40 and 50 per cent. of coal, a saving of 50 per cent. in time of heating the furnace and a greatly improved quality of iron.

A dispatch to the New York Sun, dated Albany, January 27, says: "The Democratic State committee failed to make a choice of a man to represent New York in the Democratic committee. They met at the Delavan house, and after thirty ballots adjourned at midnight. The vote was 17 for Roswell P. Flower and 17 for William J. Mowray on each ballot. This leaves the State without a representative on the national committee. It was a square down fight between friends of the President and friends of the Governor, and neither won."

The Choctaws are greatly excited over their net proceeds claim against the United States government, for property which had to be abandoned in Mississippi and Alabama, when they were removed west. This property consisted of improvements, houses, fences, etc., on lands sold to the government, and for which the government agreed, in the treaty, they should be paid. It has never been paid, and now amounts to the round sum of \$3,600,000. It has been allowed by Congress two or three times and also by the United States court of claims. About half of it is pledged to attorneys and the other half to middle men, and the quarrel among these worthies causes some confusion in paying the claim.

The following is published: "Now, therefore I, Howard Douglass, Supreme Chancellor of the Supreme lodge, Knights of Pythias, of the world, do issue the following order: "That

the Grand lodge of the Knights of Pythias of Pennsylvania, from and after this date, is hereby suspended and all its powers and functions as said Grand lodge, emanating from the Supreme lodge of the Knights of Pythias of the world, revoked and recalled; and its acts as a Grand lodge, or of its officers during its recess, cease to be legal or of any force or effect."

A Boston, Mass., dispatch of the 28th January says: The executive committee of the Democratic State committee of Massachusetts this afternoon adopted resolutions stating that the Democrats of this State are a unit in their support of President Cleveland and the policy outlined in his last annual message to Congress; that we believe it to be the duty of Democrats throughout the United States to advocate, support and insist upon the adoption of the principles enunciated therein, as the great issue upon which the Democratic party with its candidates in the approaching election, can achieve an overwhelming victory at the polls.

A dispatch from Lincoln, Neb., dated January 24, says: So much suffering and death has been reported among the teachers and pupils in this State in the last storm that prominent people and papers have advocated public contributions to the heroic teachers and to aid those who have been crippled through losing limbs by freezing. To secure accurate data the State Superintendent to-day issued a circular calling upon all County Superintendents to forward at once the names of teachers and pupils in their locality who perished in the storms, those who have since died from the effects of exposure and the names of teachers who performed heroic actions in saving and attempting to save the lives of their pupils.

A Boston special says that arrangements are completed for the formation of a milk trust which is to include every cow that contributes to the Boston market. It was also proposed that a sum of money, say \$25,000, should be put into a pool for the purpose of buying creameries, twenty in number, at the most important central points of the milk-producing districts, these creameries to be used for the storage of milk when there is a temporary over-supply in the Boston market, and at such times as there may be controversies with the contractors. It was also proposed that the trust, as a corporate body, should buy milk in large quantities, thereby securing the lowest rates, and sell to producers at prices far below those they now have to pay. The scheme was referred to a committee to report to a special meeting to be held thirty days hence.

Gossip About Stock.

That well known and careful breeder of Poland China swine, Mr. Wm. Plummer, Osage City, Kas., renews his breeders' card and wishes to state that no more pigs will be for sale until May, 1888. Last spring pigs have all been sold. Mr. Plummer is a permanent advertiser and finds that it pays him.

It is gratifying to the publishers to call attention to the poultry card of Mr. Mark S. Salisbury, Independence, Mo. This makes the seventh consecutive year for this successful advertiser with this issue of the FARMER and shows that the merits of this paper are unsurpassed as a profitable medium for reliable advertisers.

Mr. Burt L. Mannel, Toronto, Woodson County, writes: "Stock is looking well. It has been pretty cold, twenty-four below zero; the ground is getting thawed out, lots of stock water now. Before the thaw, water was getting frozen near to the bottom. Corn turned out about fifteen bushels to the acre on the prairie; no eats, bugs got away with them."

Every farmer that has cows will do well to examine the merits of the Champion Creamery, which raises all the cream, between milkings, and makes a most superior grade of butter. It has a surface and bottom skimmer, so that every one using it can suit his convenience. Every one should examine the illustrated pamphlets before purchasing others.

Sales made since my ad commenced in the KANSAS FARMER, writes W. S. Hanna, Ottawa: "I have shipped two old boars, one to that active, wide-awake breeder, F. E. Scotten, of Bolivias, Mo., and one to the firm of M. Hicks & Bros., Girard, Kansas. This firm visited the herds Robert Cook, R. Baldrige, I. N. Whipple, and others, before purchasing of us. Sold a pair of young sow pigs to S. Stiers who takes them to Hayden, Ohio; a pair, including a Buckeye boar, to that fine breeder, M. McMillan, of Globe, Douglas county; a boar to W. S. Getzdafer, Coffeyville, Kas.; one to James

Cooney, Colton, Kas.; a sow with pig to J. M. Henson & Co., Council Grove, Kas. We have bought Lord Corwin 7th 1651 S, a three-fourth Corwin boar, and a Lampe Bros. Tom Corwin boar, to increase the Corwin blood of sows already over one-half Corwin blood.

M. S. Hanna, Ottawa, Kas., says: "I can't get around the fact that one notice stating that I would 'sell old boars at half original cost,' though few had any idea what low prices that meant, brought me four inquiries and two buyers within a week thereafter, and added two more counties to the list of twenty-six. We are continually adding new blood, having bought five new sows also, and our prospective sales are very encouraging from many letters received.

Bloomington, (Ill.) Pantagraph: Farmers clubbing together to buy one or more imported draft stallions, is proving quite satisfactory and the plan is becoming popular all over the West. Five or ten farmers unite, each having several mares to breed; the best class of stallions is secured, and a liberal patronage is thus readily obtained, and the community benefitted by the great increase in the horse breeding interest, and the improvement in quality and selling value by the grading up to meet the demands of the market for more heavy horses.

A meeting of Hereford breeders was held at the parlors of the Windsor hotel Wednesday to complete arrangements for competing for the prize offered by the National Hereford Association for the best Herefords raised west of the Mississippi river. The plan proposed is to form a pool among Hereford breeders, and share expenses and divide the profits. The following prominent breeders of Herefords were present at the meeting; Charles Gudgell, Independence, Mo.; J. S. Hawks, Colony, Kans. C. M. Leighton, Lincoln, Neb.; F. W. Smith, Columbia, Mo.; F. R. Foster, Theo. Carran and F. P. Crane, Topeka.

The committee of the Consolidated Cattle-Growers' Association at Washington had a hearing before the Senate committee on Agriculture, recently, submitting reasons why Congress should pass without delay the cattle-growers' bill for the suppression of contagious pleuro-pneumonia, introduced by Senator Palmer. Hon. E. S. Wilson, of the Illinois board of Live Stock Commissioners, also made an argument before the committee in behalf of this bill, based upon facts developed during the late outbreak of the disease in this city. Every cattle-breeders' association that has met since last November has endorsed this bill.

Springfield (Ill.) Journal: A full-blooded Alderney cow owned at the St. Nicholas hotel farm, about three miles from Springfield, has displayed a wonderful proventive capacity of late. Last Wednesday she gave birth to a fine, large calf of masculine gender. This was not strange, but she failed to furnish the newly developed bovine with nourishment. The manager of the farm supposed the cow was "spoiled," and turned her in with the fat cattle for market. The farm hands were astonished to-day at the birth of two more calves from the same cow. The latter are heifers, and since their birth the mother has furnished an abundance of milk for her triple production.

Bill Nye, the great American humorist, heralds the advent of good stock sales for 1888 by advertising his cow as follows: "Owing to ill-health I will sell at my residence in town 29, range 18 west, according to government survey, one plushed-raspberry colored cow, aged 8 years. She is a good milkster and not afraid of the cars—or anything else. She is a cow of undaunted courage and gives milk frequently. To a man who does not fear death in any form she would be a great boon. She is very much attached to her home at present, by means of a trace chain, but she will be sold to any one who will agree to treat her right. She is one-fourth Short-horn and three-fourths hyena. I will also throw in a double-barreled shot-gun, which goes with her. In May she generally goes away somewhere for a week or two, and returns with a tall, red calf, with long, wabby legs. Her name is Rose and I prefer to sell her to a non-resident."

Consumption Surely Cured.

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

Excursions to the South.

Arrangements have been perfected for a series of cheap excursions to the South, by the Gulf Route. Excursions will leave Kansas City and stations on that line on Tuesday, January 24, February 7 and 21. Tickets will be sold at the rate of one cent per mile from Kansas City and stations south on the Gulf line, and will cover prominent points in the States of Tennessee, Mississippi, Alabama and Louisiana. Excellent opportunities for homeseekers to investigate the many advantages offered in the South. For full information, see excursion bills; address any agent of the Company, or J. E. LOCKWOOD, Gen'l Pass. Agent.

Farm Loans.

Loans on farms in eastern Kansas, at moderate rate of interest, and no commission. Where title is perfect and security satisfactory no person has ever had to wait a day for money. Special low rates on large loans. Purchase money mortgages bought. T. E. BOWMAN & Co., Jones Building, 116 West Sixth street, Topeka, Kas.

Short-Horn Bulls for Sale.

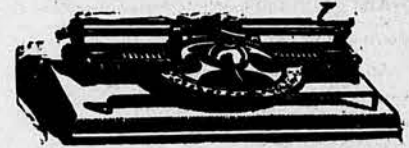
Five extra good registered Short-Horn bulls for sale cheap—on long time, if desired. J. B. McAFEE, Topeka, Kas.

I will exchange farm lands or Topeka city property or Garnett city property for dry goods or mixed stocks. J. H. DENNIS, 420 Kansas Avenue, Topeka, Kas.

O. N. McCLINTOCK & CO., MANUFACTURERS' AND General Purchasing Agents TOPEKA, KANSAS.

We are State Agents for and keep stock and can fill large or small orders on short notice, of
WHEELDON'S ADJUSTABLE SHADE FIXTURE,
INDESTRUCTIBLE FUEL CARTRIDGE, AND
PATENT SELF-LOCKING MAIL BOXES.

"The World" Type-Writer



Guaranteed to do as good work as the high-priced type-writers, and only costs \$10.00. Sent to any address on receipt of price, or by sending \$1.00 to guarantee express charges, we will send one C.O.D.

Cylindrical and Portable Letter Copying Press.

Size—11 inches long, 3 inches diameter. Nickel Steel. Weight 2 pounds. Price \$5.00. Fifteen letters copied at a time on single sheets, using ordinary writing utensils, while such copies are adapted to all systems of filing. Use the PORTABLE, in travelling or at the desk.

OBLINGER

CHAMPION - HEAT - DISTRIBUTOR.

It will save half your fuel. It costs only \$2.00 for size No. 6. It can be attached to any stove in fifteen minutes.

The Chicago Edwards' Oil Burner & Manuf'g. Co.'s Goods, consisting of PETROLIA HEATING STOVE, for Parlor or Office, and OIL BURNER FOR COOK STOVES AND RANGES. No dust, no ashes, no smell. Cheaper than Wood or Coal. Also OIL BURNERS FOR STEAM BOILERS. Also ECONOMICAL ASBESTUS FUEL CARTRIDGE AND FIRE KINDLER.

ECONOMY WALL DESK.—Everybody who has a home should have a Wall Desk. Cheap, handsome, convenient.
"NEW ERA" HYDRAULIC CLOTHES WASHER—On which the manufacturers offer \$1,000 to any person who will produce its equal. Agents wanted.

Correspondence solicited. Circulars on application.
O. N. McCLINTOCK & CO.,
Manufacturers' and General Purchasing Agents,
No. 417 Kansas Ave., TOPEKA, KAS.
(Rear Room Second Floor.)

HELP WANTED. \$25 a week and expenses paid. Steady work. New Goods. Samples free. J. F. HILL & CO., Augusta, Maine.

GUNS Single Breech Loaders, \$3.75, \$8.50 and \$11. Double, \$8, \$10.75, \$13.50 and upwards. Fishing Tackle, Pocket Cutlery and General Sporting Goods. Send for 162-page Ill. Catalogue. CHARLES B. PROUTY & CO. 63 & 65 Washington Street, Chicago, Ill.

FREE If you want to receive hundreds of letters, circulars, pamphlets, books, papers, magazines, etc., FREE, send 10 cents (silver) and get your address in the OLD RELIABLE AGENT'S RECORD, which goes all over the world. It is but a small investment which pays you well. One person received more than 600 packages of mail from two insertions. Address RECORD PUB. CO., Muncie, Indiana.

The Home Circle.

Discipline.

BY PHOEBE PARMALEE.

The ceaseless washing of the waves upon the shore have left their impress;
The sands are purified and white. The pebbles, too, have felt the wave's caress;
All roughness worn away—their own true colors clear, they thank the wave
That through long ages past had brought such grace—such beauty gave,
So, when eternal ages shall have come to us,
we then may gaze
Back into time, and note the things which wore and fretted in the days
That seemed so long and troublesome, the nights that brought no rest,
And we shall say, Behold! I know those old afflictions made me blest.

The Old House at Home.

There's a little old house standing in a back street,
Like its builder and owner grown gray;
And its walls the old story of time still repeat,
Plainly showing the marks of decay.

In its chambers there lingers the patter of feet
That will never grow weary or old;
In the house that now echoes their rhythmical beat,
The floors are all laid of pure gold.

A wonderful garden, when full in its bloom,
Behind the old house shed its light;
Earth never held flowers with such a perfume!
Or tinted in colors so bright.

From the home of my childhood my face I may turn,
O'er the world I may wander at will—
In the hearts of its roses the red fire will burn,
And their sweet breath will follow me still!

There were sweet-scented violets royally dressed
In velvet of purple and gold,
Shyly peeping up out of their cool, fragrant nest,
In the grasses' o'ershadowing fold.

There was humming-bird's corner, where odors of spice
Intermingled with lilac's sweet scent;
Like to rainbows in spray these winged "gems without price,"
Iridescent, now came and now went.

Some day (and that will be a day full of dread!)
Through that garden will run a new street,
Then on other than hearts of the roses will tread,
And will trample, the strange, careless feet!

Soon the workmen will raze the old walls to the ground,
And the winds will sweep through as they fall—
Will the outermost wave of the ripples of sound
Wash softly against the white wall

Of the home where the missing behold the Lord's face,
And smite jarringly sad on their ears?
If sorrow in Heaven could e'er find a place,
Would they not be melted to tears?

Why not spare the old homes where our childhood was passed?
Build the new ones elsewhere if you must;
Let the old homes remain as they are to the last,
Till Time's chariot grinds them to dust!

THE FAIR

Read before the Mound City Farmers' Institute, January 19, 1888, by Mrs. M. M. Stearns.

The annual fair has become so much the fashion of the time, the subject seems of importance enough for a paper before this meeting. So universal are they that for good or evil they must wield a powerful influence on the civilization of the age. The fair talk begins in the spring, increases in volume through the summer, and culminates in the grand finale of the fair in September. It is looked forward to by a large proportion of the community as an event of interest, and dates are remembered with reference to it, as, "that was before the fair," or, "that was after the fair," as though the precise time was definitely understood when thus named.

Our gala days are ever too few as life passes away, and who can tell all the bright memories that cluster around the time in the brain of hard-worked Ebenezer when he thinks how blooming Abigail looked in that new dress worn first at the fair; how many a sharp word he chokes back over the neglect to supply the missing button or have dinner on time, if she chances to smile the way she did that day at the fair; or how many divorce suits are saved the courts when the gilding of the marriage bonds seems ready to—well, in the fierce heat of a first quarrel, when both by a most lucky chance remember that beautiful day at the fair, when the sun shone on the happy crowd and they too strolled away into that

dream-land, where their vows were plighted, while the music of the band filled all awkward pauses. How young Tom and Dick look forward to the fair in the long hot summer days, when the interminable corn rows that must be followed hour after hour seem a never-ending series. They will see something of the world then. They will creak the colt then, and may be they can compass a new buggy to show him off in; and Ann and Julia, do not their thoughts run often on the possible finery that shall make their wealth of youthful good looks beautiful. And the farmers' wife, from whose class the statistics say, are furnished the largest percentage of the insane, may possibly be saved from increasing that percentage, by the pleasant anticipations of the fair, as she cans and preserves for her exhibit in the pantry stores; and the farmer himself may be lighter of heart for the hope of the respite from toil the days of the fair will give him.

But while we may dwell pleasantly on the advantages and pleasures of the fair, we come to some of the abuses that make thoughtful people question whether the evil may not outweigh the good. We wish to teach the children the advantages of sober industry, of slow but sure economical gains. We preach against the evil of gambling and we allow gambling establishments at every corner. The wheel of fortune, and what not of gambling devices which pay a revenue to the association, and the gambler's voice, crying his wares and calling his victims, falls into cadence with the music, and we pass along content with—"helps pay expenses, the license this man has paid"—while our precious Tom and Dick, and may be Ann and Julia, have stopped there to see the fun. It is holiday time with them; the stern lines of duty are relaxed; that silver dollar is heavy in Tom's pocket, why not try it? Why not let Julia see how nimbly he can make it two. And so far the downward path there must always be the first step. We must not complain; we sanctioned it. We needed money for expenses. No matter if the gambler departs with hundreds of dollars won from the young and foolish of the community, the very ones we are bound to protect if we are wiser. The fair was helped on by the license he paid, let him go.

Then the race-track at an agricultural fair has become as sure as stock pens, and just as necessary, we are told. There lies the smooth, dark ring of track, on one side a judge's stand, opposite an amphitheater of seats to which the public are admitted at ten cents a head to see the races. Long after the seats are filled the dark ring lies there solitary—crossed now and then by a mounted police, chasing a reckless dog which has dared to invade its charmed circumference, and the public cheer, thankful for a break in the long monotony of waiting. The judge's stand is beginning to fill; now, surely, the curtain will rise and the play begin; but it does not. One of the judges leans over and calls, "Jim! come up here, Jim!" and a man crosses the track in response, and the knowing ones say they are after Jim to increase his bet; somebody has got to help or the race don't come off. But now, slowly and solemnly an animal is moving along the track. It is long and lean and resembles a horse and a greyhound. Harnessed so it is an airy combination of wood and iron on two wheels, on which sits a driver who spreads himself on both sides of the animal until we are reminded of a centipede, and he carries a whip. No. 2, equally long and lean, with a driver and a whip. No. 3, ditto, except he wears what looks like manacles on each leg, and his driver carries a whip. Their speed increases as they go round and round, and by and by come up into line by the judges and are told to go. There seems to be a desperate scratch to get over the ground by the poor animals, the one tries to take short-cut cross lots, he is reined in, and round they come, the sound of the flying feet and hissing of the whip as it comes down upon their shoulders, mingling with the sharp cries of the drivers and the shouts of the crowd. That noble animal, the horse, which we are told loves the racing, stands still at last, his thin frame trembling, his nose thrust out like a dumb cry for "air! more air!" There are whip welts on his shoulders, while his nostrils play like wings; he is tottering while a groom runs up with smelling salts in the shape of a huge sponge, and a warm

blanket is thrown over him and he is led away.

Contrast this description with that of a Spanish bull-fight, and which is the more civilized? In one the animal is goaded to frenzy for the amusement of the crowd; in the other he is whipped and driven to exhaustion. And when you ask what connection horse-racing has with an agricultural display, you are told it draws a crowd and you couldn't do without it; and besides, a fast horse is the pride and desire of every farmer. The pity of it! That the noble, high-lived, well-fed horse of any prosperous farmer who jauntily carries his master whither he wills, should ever be made into one of these speeding machines, or that young Tom or Dick, catching the racing and betting fever, neglects his work, forgets the farm to make a racer of the colt he has reared so carefully.

Would it not be possible, with this gala time, to give us something better than these dreary races; some speaker to come to us and give us some new thought, some inspiration to help us forward in this march of life, or a play that is really amusing, whereat we can heartily laugh and forget life's tragedy? Can we not make of the fair a benefaction, and by eliminating the evils too patent to the observing, give a new lease of life to a holiday time that we may all anticipate with pleasure?

The Model Farm Home.

Read by Mrs. Agnes Westwood, before the Farmers' Institute at Oak Grange Hall, January 20, 1888.

We all admire beautiful architecture, and grounds prettily laid out with trees and flowers. God not only gave us a taste for the beautiful, but created in nature everything for our admiration; and if we fail to see it, is it not because we do not educate ourselves to appreciate it, as we should? But what is it that makes the model home? Costly furniture may be there, and everything that money can do may be done, to make life enjoyable, and yet something may be wanting. These things sometimes tend to make us selfish and unfeeling toward the outside world; but if contentment, harmony and love are there, no matter what our surroundings are, the home will be a happy one, where each member is careful of the other's feelings, and will not needlessly wound them. And if there should be one who is old and feeble, or young and helpless, we must be particularly watchful over them, attending their wants with love and patience; by doing so we shall not only add to their happiness and comfort, but be building our own characters and cultivating true heart refinement.

And, oh! we must each one make our aim in life high; we shall be sure to fall a little below the mark; we must watch over ourselves; our evil nature is always ready to assert itself, and our influence may be greater than we think. There are always others watching our footsteps, and will in a measure walk in them; let us be very careful where we lead them.

We must be contented with what we have, making the most of it in every possible way; for what our hearts desire is not always necessary or best for us to have." We must be faithful in our smallest duties, and that will help us to be more successful in our larger undertakings.

Let us help one another in our education, and in making plans for the future, in perfect love a confidence in each other; never let a feeling of envy enter our hearts, so that we may truly rejoice in each other's success.

We who attend to the wants of the family must make it a rule to be punctual, and try to have the meals ready at the appointed time, and if we are sometimes kept waiting till the dinner seems spoiled, let us remember it is no worse for us, than for those who are detained, so that when they come in hungry and tired, let us be cheerful as we can, for the dinner will taste no sweeter for being served with impatience.

Music is a great charm in the home circle, and adds greatly to its mirth and pleasure, but it is not essential to its happiness. We can all have bright fires and everything in its place, and with plenty of books and papers to read and enjoy together, these long winter evenings, we ought to have happy homes.

Hood's Sarsaparilla is a purely vegetable preparation, being free from injurious ingredients. It is peculiar in its curative power.

From Bramblebush.

With the new year the KANSAS FARMER comes to us in a new dress, and although it is very pretty, not all the fancy headings can make the paper any better or any dearer. So many years it has come to us that it seems like one of the family. Through the bright summers and the long winters, through joy and sorrow, still we have welcomed the FARMER.

Phoebe Parmalee: I also scald the milk in winter and stir the cream. I think that it saves work and one certainly gets more butter that way. We bake bread only once a week. It generally holds out pretty well with the aid of corn bread and corn cakes.

[Here follows a "crochet pattern," but it is so much abbreviated, and is written so closely that the printers hesitate about putting it in type lest they make mistakes. If Bramblebush will re-write it, putting the lines and also the words farther apart, and writing it all out just as it is to appear in print, we will have no trouble in getting it right.—EDITOR.]

I think you are lucky, Phoebe Parmalee, in having canned fruit for winter. Here in the southwestern part of Kansas we have not raised any fruit yet. So we depend a good deal on the evaporated fruit, which I like much better than I do the canned fruit you buy.

BRAMBLEBUSH.

How to Cure a Cold.

Would some one like to know how one woman treated two cases of severe cold? The patients were children, and their throats and lungs seemed to be in a badly inflamed and irritated state, so much so that the usual compress of cold water had little effect in restoring health. I placed the children, one at a time, in an easy chair with the feet in hot water. I continually added to the water, keeping it as hot as the child could bear. While attending to the foot bath I had at hand a basin of hot water and wrung cloths—alternating two—and put them on the afflicted throat and chest. After a half hour of such treatment I put on a cold cloth well covered with flannel and put the patient in bed. The result was all that could be desired.

P. P.

Fashion Notes.

Ermine and sable are old or long known furs.

The most fashionable boas reach nearly to the hem of the dress.

The newest sealskin sleighing hoods are shaped to the plush caps of little girls. The crown is high, the brim close and turned back.

"Perpetual motion" is the latest departure in earrings. The solitaire pendant is set on a miniature ball, and oscillates continually.

A new design in cuff buttons represents tiny envelopes of silver, with gold stamps in the upper right-hand corner, and a monogram set with tiny diamonds in the center.

A new arrangement of ribbon upon plain bonnets, instead of the standing loops so long in vogue, is to gather or plait it along one edge and place it back and forth three or four times from the brim to the top of the crown.

The prominent feature of the present season's bonnets is the long, loose folds which form the soft crowns and full fronts. All fabrics, velvet, cloth and felt, are thus applied, being considered more effective than when drawn smoothly over a frame.

Fur-trimmed bonnets will no doubt be extensively worn as the cold season advances. Sable, black Persian lamb are the furs most liked, and they are used in borders, in tabs on the crown or loops for trimming and in tiny heads set about among the trimmings.

Pretty black velvet toques for young ladies are trimmed with a single quill which points forward from the back. The quill may be black or a grayish white if to be worn with various dresses, or colored ones may be used and changed to harmonize with any dress.

It is good form now to have one's garments harmonize in style and material, even though a contrast in colors is allowed. The felt hat accompanies the ulster or the cloth tailor gown for morning wear, while velvet and embroidered bonnets are reserved for dressy wraps and costumes of silk, velvet, plush and fur.

ELECTIC, ALA., October 20, 1886.

Dr. A. T. SHALLEMBERGER, Rochester, Pa.—Dear Sir: Last February I received from you a bottle of your Antidote for Malaria, and gave it to a young lady attending school here, but who had not been well enough to go for several weeks, and was quite broken down in health. In a few days after taking the medicine she was back in school again, and has not lost a day the entire summer. I think it is the best medicine I ever knew.

Yours very truly,
R. C. WILLIAMS.

KANSAS FARMER.

ESTABLISHED IN 1868.

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KANSAS FARMER COMPANY.

OFFICE:
321 Kansas Avenue, Topeka, Kas.
S. J. CRAWFORD, - - - PRESIDENT.
J. B. McAFEE, - - - GENERAL AGENT.
H. A. HEATH, - - - BUSINESS MANAGER.
W. A. PEPPER, - - - MANAGING EDITOR.

SUBSCRIPTION PRICE:
ONE DOLLAR A YEAR.

An extra copy *ree* one year for a Club of six, at \$1.00 each.
Address **KANSAS FARMER CO., Topeka, Kansas.**

ADVERTISING RATES.

Reading notices 25 cents per line.
Business cards or miscellaneous advertisements will be received from reliable advertisers at the rate of \$5.00 per line for one year.
Annual cards in the *Breeders' Directory*, consisting of four lines or less, for \$15.00 per year, including a copy of the *KANSAS FARMER* free.
Responsible advertisers may contract for display advertising at the following rates:

	One inch.	Two inches.	Quarter column.	Half column.	One column.
1 week	\$ 2 00	\$ 3 50	\$ 6 50	\$ 12 00	\$ 20 00
1 month	6 00	10 00	18 00	35 00	60 00
2 months	10 00	18 00	30 00	55 00	100 00
3 months	14 00	25 00	40 00	75 00	125 00
6 months	25 00	45 00	75 00	135 00	225 00
1 year	42 00	75 00	120 00	225 00	400 00

All advertising intended for the current week should reach this office no later than Monday.
Electros must have metal base.
Objections to advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.
To insure prompt publication of an advertisement send the cash with the order, however monthly or quarterly payments may be arranged by parties who are well known to the publishers or when acceptable references are given.
Every advertiser will receive a copy of the paper free during the publication of the advertisement.
Address all orders,
KANSAS FARMER CO., Topeka, Kas.

The Kansas State Fair will be held at Topeka, September 17 to 22, inclusive.

The Nebraska State Fair is to be held at Lincoln, September 10 to 14; preparation days 7th and 8th.

A Washington correspondent says: "A forthcoming tariff bill puts wool, salt and lumber on the free list, and reduces the tax on tobacco and fruit brandies and 20 per cent on sugar."

Mrs. Laura M. Johns, in a circular letter to the press of Kansas, calls attention of women in cities to the matter of registration so that they may be entitled to vote at the spring elections.

A considerable number of subscribers took advantage of our offer to wait on them until the end of January, and some of them have written letters of thanks. We are trying hard to do our part.

Fair associations should not forget, when planning for next fall fairs, that the *KANSAS FARMER* is a good premium. It would be worth more to some farmers than a premium of twenty-five dollars in gold.

Proceedings of the national convention of cattle-growers at Kansas City last October 31 and November 1 and 2, are now published in pamphlet form officially. It makes a book of 102 pages in convenient form for reference. The addresses delivered before the convention are all in this book and constitute a feature of great merit.

A correspondent asks—"How would Major Sims, ex-Secretary of the State Board of Agriculture do for our next Governor?" Major Sims is good material for Governor, but he declined a reelection to the office which he filled so well because he wants to get out into the open air again. Six years of office has satisfied him on that score. He wants the rest that freedom ensures.

WHISTLING AGAINST THE WIND.

A man named Wilkeson—Frank Wilkeson—is gaining some notoriety by reason of the select medium through which he is permitted to say some mean things in a cowardly way. Frank must have a crow to pick with somebody who, like himself, owns land in Kansas. Without questioning his motives, it is sufficient to say that if he really does not know any more about Kansas, her climate, soil and people, than his recent letter in the *New York Times* shows, it would do him no harm to let that subject alone; for when a man goes to writing about things of which he knows nothing or so little as to expose him to ridicule and contempt, people soon learn to suspect him and then to despise him. He declares no corn can be raised, profitably raised, west of the 97th meridian, and that only on corn lands can prosperity be found. He warns the Eastern companies that they will lose everything if they venture to touch central or western Kansas, for enough cannot be raised to support life. Here is an extract from his *Times'* letter:

"And I further claim that to plant trees and to build houses and sheds on, and to dig wells in land that, owing to its altitude and climate, will not produce sufficient crops to support a man and his family, does not add to its value. The standard with which to measure the value of agricultural lands is the produce that can be grown on it in average years. If it will not yield enough grain to keep a family, it is worthless for agricultural purposes, and should be held sacred to grazing. The improvements that may be made on it cannot be eaten. They produce nothing except an increase of taxation. No one can clothe himself with a well, or wear a cow shed on his back, or eat a cottonwood tree. My neighbor's land was originally too dry to produce sufficient crops to support him and his family. Its productive capacity has not been increased by cultivation, and, in my opinion, the scanty crops he has grown on it have lessened its value."

It is strange that men will talk in the face of facts which prove the falseness of what they say. The assessors' returns, made from year to year, tell a story of continued growth. The State is twenty-seven years old, and our taxable property at a 30 per cent. valuation, amounts to \$300,000,000, and more railroad mileage was constructed in Kansas in 1887 than in any other State of the Union. Western Kansas is not as good a grain-growing region as eastern Kansas, or as Missouri, or Ohio; but grain is raised there, and it produces many crops in abundance, as sorghum, rice corn, Kaffir corn, millet, and vegetables of many varieties. Western Kansas is a good stock country, and the farmers there are fast learning to adapt themselves and their work to the peculiarities of the climate. Trees do grow in that region; trees grow well anywhere in Kansas, if they are properly cared for. Last year was hard on people in many places in some of the older States. Illinois suffered more, in comparison, than Kansas did.

We have had reverses in Kansas, as people have everywhere; but with all our misfortunes our population and our wealth have increased in a manner unparalleled in the history of settlement. Individual cases of hardship—many of them—have occurred and will continue to occur; but they are not the measure of our condition. Kansas is prosperous, and the facts are present in overwhelming abundance to prove it.

THE LAMP IS STILL BURNING.

"While the lamp holds out to burn, the —" you know the rest. A few of our old friends, 1887 subscribers, with "o 52" on their papers, failing to avail themselves of our extension of time a month in their interest—to January 31, will miss the regular visit of the *KANSAS FARMER* next week, (unless in the meantime they renew their subscription) because their names are dropped

from our mailing list. But they are not to be left comfortless on that account. They can still return by taking advantage of our standing offer this year to receive small sums—any amount you please—and credit them to the senders at yearly rates. Ten dimes, four quarters, two half dollars—any way to make up the dollar during the year. We want all our old friends with us. We have several thousand new ones this year, and we want a great army with us in the end. This will be a good crop year. Let us stay together.

TWO DOLLARS A TON.

Is that enough for sorghum cane raised for sugar-making? The average crop on good land is ten tons per acre. Is twenty dollars an acre enough for such a crop, or for any crop? An equally good crop of corn would be—say fifty bushels per acre, and corn can be made worth forty cents a bushel by putting it into milk, butter, pork, mutton and beef. There is twenty dollars for corn fed on the place, leaving all the fodder, which is worth as much as two tons of good hay—ten dollars more; in all thirty dollars and not a pound of the crop taken off the farm except in the most concentrated form. It requires as much labor to raise cane as it does to raise corn, and if corn is worth thirty dollars an acre there is no use in raising cane at twenty.

The Parkinson works at Fort Scott paid two dollars a ton for the entire crop, the seed amounting to an average of two bushels to the ton of cane as it came from the field. The seed is not used for making sugar, but it is worth as much as corn for feed. Farmers could remove the seed as easily as they husk corn and a good deal cheaper, so that if they would retain the seed, selling only the topped cane, they would have about as much profit from an acre of cane as from an acre of corn, provided the topped cane is sold for as much as the whole of it is at present.

Improved appliances in sugar-making have reduced the operation to a simple certainty, and if it be true that 75 pounds of sugar to the ton of two-dollar cane will yield a fair profit to the manufacturer, as Col. Colman, Commissioner of Agriculture, says it will, the actual yield of 125 pounds of sugar would justify a much higher price for cane. At any rate the seed might be left with the farmer, the factory taking the headless cane and paying a reasonable price for that. What is needed is a fair division of profit between the farmer and the manufacturer.

Let us look at the facts in a business-like way. A ton of cane as it is taken from the ground may be divided into three parts, thus: Leaves and sheaths 200 pounds; tops 300 pounds; stalks, that is clean cane topped, 1,500 pounds. That which is used for making sugar and molasses—the topped cane clean of leaves and sheaths, is 75 per cent. of the entire cane. Taking ten tons of who'e cane as the average product per acre, the factory would use seven and a half tons of it in making sugar, the other two and a half tons being leaves and tops. Can the factory afford to pay as much for the seven and a half tons as it has been paying for the ten tons? And if so, will that be a fair price?

Prof. Cowgill, in his report on the Fort Scott sugar works, says seven and a half tons of topped and clean cane (the product of an average acre) will yield 750 pounds of sugar and 1,000 pounds of molasses. If the sugar is sold at five cents a pound (\$37.50) and the molasses at two cents a pound (\$20) we have \$57.50 for the whole product. [The Fort Scott works sold sugar at 5 1/2 cents a pound and molasses at 20 cents

a gallon. A gallon of molasses weighs ten or eleven pounds.]

Mr. Manager Parkinson, in his report of the actual operations of the works, puts the actual cost of working up a ton clean cane at \$7.50, which sum deducted from \$57.50, value of the manufactured product, leaves \$50 gross profit on an acre of cane (ten tons). This, as every one knows, is not net profit, for the expense figures above given include only the actual direct and immediate cash outlay in the daily working of the factory, as labor, coal, salaries, insurance, and sundry necessary expenses, taking no account of the capital invested, interest, taxes, etc., nor of the fact that only seventy days of the year were included in the run.

There is enough in these figures, as their results impress our minds, to justify the factory in paying as much for the topped cane of an acre (leaving the tops with the farmer) as it now pays for the whole cane on the same ground; that is to say, pay two dollars for the topped stalks of a ton of whole cane; in other words, two dollars for 1,500 pounds of topped cane.

We had not given this particular part of the subject any thought until our attention was directed to it by correspondents. Farmers are entitled to their full share of the net profits of the business, and they ought not to accept anything else. We incline to believe, since studying the figures, that when the business becomes well established, and suitable machinery is perfected, good cane will be worth more than these figures show. The factories will purchase land and grow the cane themselves whenever farmers demand more than that will cost.

Report of State Board of Agriculture.

Major Sims' report for the quarter ending December 31, 1887, contains Prof. Cowgill's sugar report, an article on sorghum as a forage plant, and gives many statistics concerning population, farms, live stock, crops, etc., papers on miscellaneous subjects, tables showing vacant public lands, financial condition of fair associations, meteorological information, etc., etc.

The population of the State March 1, 1887, was 1,514,548.

The wheat crop of 1887 is given at 8,616,244 bushels winter wheat, and 662,257 bushels of spring wheat, making a total of 9,278,401 bushels. Corn is put at 75,791,454 bushels; rye at 1,926,335 bushels; oats at 46,727,418; Irish potatoes at 9,178,240 bushels.

Live stock on hand March 1, 1887: Horses 648,037; mules and asses 89,957; milch cows 692,858; other cattle 1,568,628; sheep 538,767; swine 1,847,394.

The wool clip of 1886 is given as 2,664,319 pounds. The cheese product for the year ending March 1, 1887, was 496,604 pounds; and of butter the quantity is put at 27,610,010 pounds.

Value of poultry and eggs sold during the year is stated to have been \$1,757,508.

Bearing fruit trees: Apple 4,746,670; pear 118,880; peach 4,330,265; plum 487,219; cherry 1,073,354.

Kansas City has developed a wonderful live stock trade. By courtesy of Mr. E. E. Richardson, Secretary of the Stock Yards company, we have the figures for every year since 1871, showing receipts and shipments of different kinds of live stock. To show the aggregate growth, we give the figures for the first and the last years of the period:

	Cattle.	Hogs.	Sheep.	Horses and mules.
1871	120,827	41,030	4,527	809
1887	609,224	2,423,262	209,956	29,690

The average weight of hogs received in 1887 is 226 pounds.

Population of Kansas March 1, 1887, as shown by assessors' returns, was 1,514,548.

THE LAW OF USURY.

An important case, involving a construction and enforcement of the law of usury, was decided in the United States District court at Augusta, Ga., recently. A citizen of Georgia named Gay borrowed money through an agent, giving notes for about 40 per cent. more than the amount of money he actually received, giving interest notes, also, on the full amount, stipulating, as usual in such cases, that should he fail in any of his promises, the whole debt should become due, etc., etc. The agent drew all the papers in his own name and immediately endorsed them over to his principal—a money-lending company in Connecticut.

Mr. Gay is a farmer and mortgaged his farm to secure payment of the notes. Crops failed and he asked an extension of time on that account; but suit was brought on the notes, and he plead usury as to all money in excess of the amount he received, offering to confess judgment for what he had the use of, together with lawful interest thereon. The company replied that the notes and mortgage were purchased by them from the man who (they claimed) acted as the agent of the borrower, and that therefore they were not chargeable with any wrong which might have been done by him; that they were innocent purchasers.

The court held the contract to be usurious as to the excess over and above what was actually received by the borrower; that the agent was the agent of the lender and not of the borrower; that the company are not innocent purchasers, that they were the real lenders, that they acted through the agent and are therefore justly responsible to the borrower for every wrong committed by their agent in the matter.

The jury returned a verdict in accord with the court's rulings on the law as above stated.

That is a correct construction of the law, and it ought to be published broadcast. A great many people—borrowers—have come to believe that the agent from whom they borrow is their agent, and that when he indorses the papers over to the persons who really furnish the money, they are at the mercy of innocent purchasers. Many times in these columns have we told our readers that these money-lending agents are acting for other persons who have money to lend, and that what they do in such matters is done for their principals—the lenders. We have many times written and published the law and the truth that the amount of money actually received by the borrower, with legal interest, is all that can be lawfully collected. Every cent beyond that is usury and cannot be legally recovered, no matter what kind of papers may be signed or what stipulations are written. The truth is better evidence than a written paper stating a falsehood.

Work in Congress.

A great many bills have been introduced, but nothing on tariff reform has yet been presented by the committee on ways and means.

Among the more important bills since our last report may be mentioned these: To provide for free coinage of silver and retire national banks; to repeal the internal revenue laws; to increase salaries of cabinet officers and of judges of the supreme court to \$15,000 a year; to allow a clerk to every member of Congress at public expense; to prevent aliens from acquiring public lands; to abolish the tax on oleomargarine; to prevent the formation of trusts; to change the time of meeting of Congress to December 31; to revise and modify the public land laws, classifying the

lands as agricultural, timber, mineral and reserved, continuing the desert land law and repealing the timber-culture act; to tax lard compounds; to pension poor ex-soldiers (the dependent pension bill); to admit Dakota and Wyoming as States; to increase the efficiency of the militia.

About Pruning Orchard Trees.

Mr. E. Eicholtz, of the Western Home Nursery, Detroit, Kas., writes us—"Experience teaches me that this is the proper season of the year to sharpen up your saws and pruning knives and go forth into your orchards and cut out all wood that is of no use to the tree, or in other words when your trees are growing in tops so much as to exclude the sun. They should be cut out so as to let the air have free circulation and give the sun a chance to shine among the branches. It requires plenty of sunlight and air to produce fine apples, peaches, pears, plums and cherries. Cultivate all young orchards in corn, but do not plant potatoes, as it will do you more harm than good. Always turn your furrow toward the tree, not from it; do not plow deep near the trees, as you will cut off the fine fibrous roots that the tree has sent out in search of food for its growth. Give your orchards good care; it will pay you better than any other labor you can perform. It requires pluck and energy to make a good orchard.

Rainfall in Kansas.

From an address delivered recently, by Prof. Snow, before the Douglas County Horticultural Society, we extract the following paragraph as being of special interest at this time:

"Eastern Kansas averages of rain 34.7 inches, while the precipitation in Western Kansas is only from 10 to 15 inches. The settlement of the country and the cultivation of the soil cannot increase this rainfall to any great extent in one generation. The rainfall kept at Fort Leavenworth by the government from 1836 to 1874, gives the following: In the first half of this period, viz., the nineteen years from 1836 to 1855, when Kansas was first settled, the average rainfall was only 30.4 inches. In the second half of this period of thirty-eight years, which transpired after the settlement of Kansas, the rainfall was 35.7 inches, an increase of 5.3 inches. This decided increase was the result of settlement of the country and breaking up of the soil. The past two years of drouth have not in any way changed the climate. We shall likely have all the rain we need for the next two years. In Kansas only one-tenth of the rainfall occurs in the winter months, while the Eastern States have nearly half their rain in that season. It is certainly a great advantage to the farmers to get most of the rain during the growing season. In Kansas the cloudiness is only 44 per cent; in New England it is 64 per cent. and in England 73 per cent. This is the reason that it is difficult to grow Indian corn in New England, and impossible to grow it in England."

Catalogues come in by every mail. Here is one lot now—Trumbull, Reynolds & Allen, Kansas City, Mo., dealers in seeds and farm implements; Aspinwall Manufacturing company, Three Rivers, Michigan, advertising their machinery, more especially their Potato Planter; J. B. Root & Co., Rockford, Ills., seed farmers and dealers; James W. Bouk, Greenwood, Nebraska, seed corn, wheat, oats, potatoes and garden vegetables grown by himself; Samuel Wilson, Mechanicsville, Bucks county, Pa., "fresh and reliable" garden, field, and flower seed; Frank Ford & Sons, "Sunnyside," Ravenna, Ohio, seeds,

small fruit plants, trees, Crandall currant, seed potatoes, grape vine, etc. John A. Salzer, La Crosse, Wis., plants and seeds; Braslan, Goodwin & Co., Minneapolis, Minn., northern-grown farm, vegetable and flower seeds; Buist's Garden Guide, 924 Market St., Philadelphia, Pa.; S. F. Leonard, 149 West Randolph St., Chicago, Ills., garden and flower seeds. A request for any of these catalogues, written on a postal card and forwarded, will be granted by any of the persons or firms named

Is the Rainfall Increasing?

Prof. Harrington, in the December number of the *American Meteorological Journal* discussed the rainfall problem, and concluded about this way. "During the last thirty years on the eastern border of the Western plains, between latitudes 35 deg. and 45 deg., i. e. from Arkansas and Indian Territory north into Minnesota and Dakota, the annual rainfall has increased perceptibly. This increase has been greatest in Iowa and Minnesota along parallel 45 deg., where the tide of immigration set in earliest, and has been most constant. Here the line of equal rainfall appears to have traveled westward about five miles a year; along parallel 40 deg. the westward movement has been slower; along parallel 35 deg., still slower."

Sorghum and Millet Mixed.

The Messrs. Gfeller, of Dickinson county, called at this office two weeks ago, and in the conversation which followed, we learned some interesting facts concerning the value of sorghum and millet mixed for stock food. They sow the mixed seed broadcast by machinery, about the first of May, and cover with light harrow. They cut the crop about the time when the millet is heading—the sorghum is not then quite in head; cut with mower and cure same as hay.

As to the quantity of seed and the proportion, they sow about three pecks of the mixture to an acre of ground, and in mixing they use a little more than one-half by measure of sorghum. They have used this mixture very satisfactorily and recommend it to others.

Some Silk Figures.

From Mrs. Davidson, silk culturist, Junction City, Kas., we obtain some facts and figures which she collected from the *American Silk Journal*.

"The American silk manufacture for the year just closed gives evidence that the industry is steadily expanding, and the output for the present year will exceed that of any previous one. In proof thereof we have an increase in the importation of raw material, additions in machinery, and the constant employment of our mills the entire year. The importation of raw silk at the ports of New York and San Francisco, for the eleven months ending November 30, '87, were 39,298 bales, at a value of \$19,726,050. The increase this year over the last is 867 bales and \$705,653 in sales.

"The value of manufactured silk goods brought into the port of New York during the eleven months ending November 30, 1887, was \$29,054,869. The increase this year over the last is \$2,848,266, or a little over 9 per cent.

Hon. Samuel J. Crawford, ex-Governor of Kansas, and now President of the KANSAS FARMER company, has been engaged about twelve years in protecting the interests of this State in public lands granted by Congress in the enabling act. June 28, last, Mr. Secretary Lamar overruled the practice of his predecessors as to Indian lands, holding that the law authorizing the payment to the State of Kansas of 5 per

cent. of the proceeds of the sales of public lands in that State did not apply to Indian lands. Upon the request of Senator Plumb, the Secretary asked the Attorney-General for an opinion as to the proper interpretation of the law referred to, and Governor Crawford argued the matter before the Attorney-General. His brief, an able and conclusive argument, now lies before us. It would be strange if, at this late day, so old, so lawful, and so common a practice, should be set aside as having no warrant in law.

A funny subscriber, renewing his subscription, says we do get a little agricultural matter mixed in with our politics, and he will try the paper another year, although he is taking several others. Our good friend knows that we give more agricultural matter than any other paper which is sold for the same amount of money.

Inquiries Answered.

GALL.—Has a horse got a gall? If so, where does it lie?

—The gall bladder is connected with the liver—sometimes imbedded in it.

GEORGE'S LAND TAX SYSTEM.—A correspondent asks for a statement of Henry George's land tax system. The request will be granted soon. We have given the information several times and will do so again when present pressure of other matter is worked off.

CATTLE AND DAIRYING.—In reading your article on the difference between Galloway and Aberdeen-Angus cattle I noticed your reference to a work called "Cattle and Dairying," published at Washington, and wishing to know how to get it, I write to ask how I can get it. Please answer and oblige. We have taken your paper ever since we came to Kansas.

—The book was issued by the Department of State at Washington. Write to the member of Congress from your district, Hon. S. R. Peters, and ask him to get the book for you. Say to him that the KANSAS FARMER referred you to him.

SWOLLEN LEG.—What is the matter with my mare, and what shall I do for her? She will be 3 years old this spring and never has been worked. Her left hind leg is badly swollen on the knee; it is swollen on the inside and out and has been for some time. She is not lame, and has a good appetite.

—It is caused, probably, by the feed, though it may be a sprain. If affected part is warmer than other parts of the body, apply bandages of cotton cloth wet with warm water to reduce the inflammation and feed some laxative food. After a few days use any good liniment. If the place is itchy rather than sore, change feed at once to bran mashes and that character of food in order to loosen the bowels and thin the blood.

QUINCY.—I have two hogs with a large lump under their throat, and I have had several affected this way in the last six months. I opened some of them; two I opened got well, one died. If not opened as soon as they come, they grow to be very large, and the hog pines away and dies. Please tell me in the next paper what the disease is and how to cure it.

—It is probably quincy or strangles, inflammation of the glands of the throat—tonsils. As soon as the swelling is observed, scarify the parts well so as to draw blood freely, and "foment the parts with cloths wet with hot water and partially wrung out, repeatedly applied to induce bleeding and reduce the inflammation." Use the following injection: Sulphate of magnesia, 4 oz.; oil of turpentine, 2 dr.; soap-suds, ½ pt. Swab the tonsils as far back as can be reached with equal parts of lard oil and turpentine, or if the hog will eat, give doses of two teaspoonfuls each in a pint of gruel. Use a feather tied on a small stick for swabbing. The hog must be thrown and his mouth held open while this operation is performed.

Topeka Weather Report.

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

Abstract for the week ending Saturday, January 28, 1888:

Temperature.—Highest at 2 p. m., 54° on Saturday the 23th; lowest at same hour, 18° Monday the 23d. Highest recorded during the week, 54° on Saturday the 28th; lowest, 5° below zero on Sunday the 22d. Killing frosts every morning.

Rainfall.—None—neither rain or snow.

David Whitmer, the last witness to the divine authenticity of the Book of Mormon, who has been in feeble health for some weeks past, died at Richmond, Mo. A few days before his death he called his physician to his side and told him that his testimony as recorded in the Book of Mormon was true.

Horticulture.

ORCHARD CULTURE.

Read before the State Horticultural Society, at the December meeting, 1887, by George Olivant, Conway, McPherson Co., (Central District).

Although residing, as I do, in a section of the State comparatively new in the field of horticulture, and having been troubled with all manner of drawbacks, such as droughts, grasshoppers, and all the attendant evils of hot winds, sun-scald, borers, and the multitude of plagues in that line, we have nevertheless come to the conclusion that horticulture can be successfully and profitably carried on within the confines of the once Great American Desert. The only requisite is a determination to succeed by taking advantage of our own successes and failures, following the course marked out by those who have been successful, and profiting by the experience of the members of this society.

The subject of orchard culture is a difficult one to write on. The question first presented to one's mind is, where shall I begin, and on what part of the subject shall I stop? If we are to suppose that every one has planted the orchard right, then we would be justified in commencing at the cultivation of the orchard proper; but that would be assuming too much; for when we look around and see some old farmers planting orchards, we almost come to the conclusion that men do not live to learn, but to forget. It is rather discouraging for practical horticulturists to be asked to give advice on the subject, and then the would-be learner take exactly the opposite course. Thousands, yes, I might say hundreds of thousands of fruit trees are planted every year and then left to take care of themselves. Generally they are planted too close for any use, appearing to a casual observer that the object is to save the land, (because it is so scarce), one reason being that the planter wants to fill up a corner, and he does not think there is much profit because he has to wait several years before he receives any return.

Of the orchard fruits the apple is the most important in the central portion of Kansas, and upon that I shall speak more especially. The selection of the site is the first to be thought of, and this is one of the most important things to be considered. It should be located on a gentle slope facing the north or northwest, if possible; it should be planted close to the house, so that you can have constant supervision over it. Any of our Kansas soils are suitable for this fruit.

The next thing to be considered is the time of planting. I prefer the spring, and am satisfied that is the best time for general planting. Fall planting can be made successful, but it requires more care and attention than is generally given.

Distance apart.—Apple trees should be planted at least thirty feet apart each way, and on rich bottom land forty feet is better. Some practice close planting, and remove part of the trees as they come in bearing; but it is rather against the inclinations of most people to cut a bearing tree down after waiting perhaps six or eight years for it to come in bearing. Pears should be planted twenty feet; crabs twenty feet; plums sixteen to twenty feet; cherries sixteen to twenty feet. Peaches—well, don't plant them if you don't want to be disappointed.

Plow the ground thoroughly and subsoil it if it is heavy land, and give the trees every chance possible. Plant only young, thrifty trees; this is the safe

guide-board in every case. Two-year-old trees are the best. The selection of varieties is another important matter. I can only repeat what has been often said, namely: Experimental planting should be done on a limited scale, unless there is plenty of money and horticultural enthusiasm to back up an undertaking of this kind. For home use select several varieties; for market purposes only a few of those which the market calls for, taking the voted list of this society as a guide. Don't plant particular varieties because they did well where you came from and are your favorites. Be sure and select varieties so that you may have a succession from early summer to winter.

Be careful in planting and make the holes large enough to take the roots in without crowding, cutting off all bruised and broken roots. Do not stick them in the ground and only half cover the roots and then wonder why they don't grow. When planting, dip the roots in water, so that the fine dirt will adhere to them, and press the dirt firmly around them. By careful planting you will be almost sure of a good stand and be well rewarded for your trouble.

Wind-breaks.—After your orchard is planted, plant five or six rows of forest trees around the orchard, on the south and west sides especially. These should be planted about four rods from the fruit trees, and the rows should be ten or twelve feet apart, the trees eight or ten feet apart in the rows. High, rapid-growing trees are the best for this purpose.

Cultivation.—The ground should be kept clean and well cultivated. I prefer clean cultivation, not planting other crops in the orchard, as the trees in central Kansas generally need all the moisture they can get; it ought not to be absorbed by some other crop. Be sure and keep down the weeds. If you must plant another crop in the orchard for the first few years, plant corn or potatoes, some crop that needs constant cultivation. Corn is the best crop as it affords protection to the trees from the wind. Cultivation should not continue later than the middle or last of July, as late cultivation stimulates a fall growth which does not ripen up well, and is liable to winter-kill. Care should be taken to prevent the depredations of rabbits. As a safe protection take some wire gauze cut in strips about six inches wide and fourteen or sixteen inches long, bend it around a small stick so that it will spring together, and then place it around the trees. The cultivation should be continued until the trees commence to bear, which will be in from five to seven years, according to varieties, when the orchard should be seeded to red clover. For the central and western portions of the State I should recommend a light mulch around the trees for at least eight or ten feet. This will have the effect of retaining the moisture which you stimulate at other times by continual cultivation, and trees so treated are not affected much by drought.

Pruning is a necessity, but not to the extent to which it is very often carried. The pruning should commence when the trees are young. They should be allowed to branch within two feet of the ground so that the branches will protect the body of the tree from the sun, and as a result few trees will be found to sun-scald, and they will be less troubled with borers in consequence. Prune so as to encourage one central stem with branches every eight or ten inches, cutting out all intermediate branches. Shape the tree when it is young, so that when it is grown no large branches will have to be removed. All that is required is to let the sunlight in the tops of the trees. Nature

should at all times be allowed to take its course as much as possible.

To raise good fruit we must always be on the lookout for insects, the codling moth must be attended to in season with a good dose of London purple. The canker worm must be treated to the same. Keep a constant lookout for borers and other enemies of the fruit and tree, and you will be well rewarded for your trouble with an abundance of good fruit.

OUTLOOK FOR HORTICULTURE IN THE ARKANSAS VALLEY.

Report of committee presented to the State Horticultural Society, at the December meeting, 1887.

GENTLEMEN:—As far as our limited observations extend, orchards that have been established a few years, the roots of the trees penetrating the subsoil below, have withstood the droughts of 1886 and 1887 remarkably well. Diseased trees have succumbed; many young apple trees, where not properly cultivated, have been destroyed by the round-headed borer—the most serious loss since that of 1874, when fully one-half of our pioneer orchards were ruined by them. Owing to the absence of heavy fall rains, the condition of fruit buds is good to withstand the extremes of a severe winter, no premature swelling of the peach buds is observable, the reverse of their condition the autumns of 1885 and 1886. From the dry condition of the soil, and the perfect ripening of the wood of the pear, no apprehension need be felt from loss by blight the season of 1888; *bactera* is with us a result, not the cause. Fully one-half of the older apple trees now in orchard in this section of the State at least will decay and be removed before a score of years elapse, the result of improper training from the first year's growth of the young tree in our overcrowded nurseries, and faulty training in the young orchard by the planter. Young trees should be trained with a main central stem, the limbs to radiate from this in all directions, as near horizontal as possible as they leave the stem, never allowing more than one limb to start from the same vertical point on the stem. When the trees are young, start the first limbs fifteen to eighteen inches from the ground; these lower limbs can be removed as the tree gains age and top growth. Thus started it will obviate that leaning to the southwest in planting and the unnatural forcing of the growth of the lower limbs on the northeast side of the tree. Next to varieties adapted to our climate, the subject of proper training is paramount to everything else. Ignorance on this subject among tree-planters is astounding, as can be verified in nearly every orchard and yard. "Plant thick, but don't thin too quick." Do not plant on a ridge; but on the lower slopes of the uplands. The profitable apple orchards are those whose roots reach plenty of moisture, and are comparatively free from insect attacks.

From observation and inquiry among our orchardists, and trial in my own orchards, I will note the conduct of a few leading varieties of apple planted by the pioneers here, brought from latitude 41 deg. 30 min. north. Red June, Cooper's White, Hightop Sweet, Keswick Codlin, early and prolific bearers; Early Harvest, tardy in bearing, but good with age; Benoni, ditto; Maiden's Blush, Fall Wine, Fameuse, good; Rambo, successful only in the Arkansas Valley, and then does not attain that excellence that it does in northern sections; Late Strawberry, Wine, Lowell, good, hardy, but shy bearers; Hubbardston, good and prolific, but shows signs of failing in tree, it will not stand a check under our hot suns; Domine, very prolific, tree hardy, but fruit drops

badly in dry seasons, often a total loss; Wagener, is one of the earliest bearers, and should be in every family orchard for fall use; Fall Pippin, not profitable; Jonathan, Smith's Cider, Grimes' Golden, Rome Beauty, McAfee, Stark, all good in tree and bearing; Winesap, if properly kept in shape is doing well on moist soils, complaint is made that it is failing on dry uplands; Ben Davis, not very prolific; White Winter Pearmain, is late in bearing, some twelve years, but the fruit resists drought and winds; season late fall and early winter, with us a noble fruit; Missouri Pippin, early and prolific, hardy as a crab, and as uncouth of growth in nursery and orchard, the most profitable apple for the southwest in the whole list; Kansas Keeper, good, one of our best late winter apples; Willow Twig, Golden, Russet, King, Northern Spy, Vandivere Pippin, and Red Astrachan, are slow and shy bearers, and unprofitable; Rawle's Janet, is a failure, the fruit cracks and soon rots under the hot suns; Yellow Bellflower, is a failure in tree on the uplands.

The grape promises to be one of our most profitable fruits for the Arkansas Valley, with an elevation of from 1,000 to 4,000 feet above sea level. The excellence of the fruit under our sunny skies and increasing accessibility to markets for choice table grapes will insure extensive planting in the near future. The Concord constituted nine-tenths of the first plantings, which, with good culture and pruning, have yielded large crops for home use and local markets. Of other varieties in fruiting, the Martha, Pocklington and Moore's Early are shy bearers and should be discarded with us. Elvira prolific, but cracks as bad here as in other sections. Iona, Ives, Diana, Perkins, Catawba, Goethe, Brighton, Delaware, Worden, Lindley Cynthiana, all good bearers and hardy; Prentiss and Ladytender, Herbemont, good on limestone soils. Many new varieties are being tested by our growers to find the best for this section. Trial alone can determine what is best for any locality. Deep planting of the grape to overcome drought is worthy of trial. California grape-growers open a hole in the soil with an iron bar, some sixteen inches in depth, drop in a sixteen-inch cutting, follow with a water can (minus the rose) and pour in just enough water to settle the soil around the lower bud; this is to root the lower bud only. If upper roots are formed later, they are destroyed by the plows and cultivators. This deep rooting is done to overcome the effects of their dry summers (no irrigation is given to the grape) or annual droughts. Their vines do not cast their leaves prematurely or the fruit shrivel under the hot sun.

Small fruits.—The winter-killing of the canes of mulched blackberries, and those where cultivation was given only in the early part of the season, has been the common experience the last two seasons; while upon the other hand, every plantation, either new or old, where proper cultivation was given, have passed through unscathed and have netted to their owners handsome returns. In the neglected plantations the canes have been checked by the drought; then when the fall rains set in, the canes take a new growth, and are full of sap, falling to harden up properly before winter sets in. Thorough cultivation through a drought, to keep the canes in a normal growing condition; or mulched heavy about July 1, the mulch to be removed as soon as the fall rains set in, to let the canes harden up for winter, will remedy the evil. Kittatinny continues to lead the list for this section. Of raspberries, Souhegan, Reliance, Cuthbert, Iron-Clad,

Turner and Gregg are good; the last is most generally cultivated by the farmers for home use. Of strawberries, Captain Jack, Bubach, Kentucky, and Mt. Vernon, withstood the drought the best; next best were Miner, Jessie, Downing, Crescent, Connecticut Queen and Parry. Those injured severely were Lacon, Atlantic, Windsor Chief, and Jewell. Serious and often total loss of the strawberry has occurred this season in the farmers' gardens and city lots.

The best implement for use in orchard and fruit plantations is the Planet Jr. cultivator, provided with a gauge wheel and three double-bladed shares or cotton choppers; it is light and can be used by a boy of 10 years; it is indispensable to keep down the suckers in the blackberry and raspberry plantation; it leaves little work to be done with the hoe.

In conclusion: From experience we think that the lack of cultivation, with improper training, are the only obstacles to large and continued yields of luscious fruits on our new soils. Persistent and thorough cultivation must be given; that will maintain that equilibrium of plant growth during our hot summers, furnishing the soil with a blanket of soil mulch—often only dry dust, but effective to prevent evaporation of the moisture below from the roots of tree and plant—is the lesson taught by the droughts of 1886-87.

JACOB NIXON.

Kellogg, Cowley Co., Kas.

Mr. Williams' Evergreens.

EDITOR KANSAS FARMER:—Just as I expected. After reading your answer to an inquiry in the FARMER of the 12th January of a correspondent wishing to know of some one that could furnish him with cedar or pine seed. I have received one letter already inquiring my price of seed, also the *modus operandi* of propagating evergreens from the seed, etc.; and expecting more to follow soon I will avail myself of the shortest and easiest way of answering all such inquiries—by your permission—through the columns of the "old reliable" KANSAS FARMER by saying, I am not in the tree seed business. I think too much of my cedar grove just north of my dwelling to denude it of its seed; preferring to set at my window these cold winter days and watch the red birds as they hop from branch to branch feeding on the seed and then hieing away to my artificial grove and the native groves near by, and in nature's own way, there planting the seed that is sure to grow.

As regards my experience in trying to propagate evergreens from seed, I will say that I have made an entire failure so far, and I have tried it several times. The birds can beat me ninety-nine times to one.

Having a little space left after the foregoing items, I will say that I am more than pleased with the improvements I see in the old FARMER from year to year, especially the improvements of the present volume. And I have been a reader of the KANSAS FARMER ever since 1863, when Judge Adams first started the paper. I wish every farmer in Kansas was a patron and profit themselves, as I am sure they would, by reading its pages.

In a late number you give a cut as well as a description of a weeping mulberry tree. If, as the cut represents it, it is a beauty—but then, I have a weeping pear tree, and I think I will give a description of it some time in the future.

J. W. WILLIAMS.

Hoyt, Jackson Co., Kas.

The Poultry Yard.

Roomy and Clean Quarters.

The first cold spell that comes is the worst on poultry, for they are not fully prepared for it, and it goes hard on them if they do not have a comfortable place to go in and roost at night. The change from moderate heat to severe cold is often experienced in our northern climate. Such sudden changes have a depressing effect on all animal life, and tend to bring on colds, catarrh and croup in fowls. Fowl houses are usually too small for the number that is kept. Many well-meaning poultrymen conceive the idea, begotten of our grandfathers' days, that the greater the number of warm-blooded animals in a given space, the greater the bodily and surrounding heat, consequently, when cold weather sets in, in place of making the house warm and comfortable, and allowing only enough of birds for individual comfort, too often they are crowded and packed like herring in a keg, regardless of sanitary laws and the experience of every old breeder.

The house should be large and well ventilated for the number that can conveniently be accommodated, for when the ground is covered with snow, as it is the greater portion of winter, the fowls are confined and do not go outside all day, and need more attention, and the keeper should bear in mind and not forget it all through the year, that a house large enough for fifty birds to roost in nights, is by no means large enough for them when confined for months by day as well as night. No matter how thrifty the fowls may be when gathered from their runs, if they be crowded into small quarters for winter, and confined for months at a time, they can hardly escape disease, and a large portion may die.

Cleanliness in and about the fowl houses is absolutely necessary for the maintenance and preservation of health and prolificacy. Our experience and observation bring to mind sad recollections of habitual neglect, and we are forced to say that not one henry in ten receives proper attention one year with another. There are far too many houses that do not get but one or two "cleanings" during the year. The droppings of the fowls accumulate like ant mounds, till the escaping gases poison the blood and derange the whole system. Common sense should impress on the negligent breeder that uncleanness is the greatest evil attending the housing of poultry. Fresh air may restrict the spread of the disease for a short time, but when the doors and windows of the henneries are shut up in winter, every breath of air that is inhaled by the fowl is laden with noxious gases. Willing hands, with brush and scraper, can do more good in a few hours toward the thrift and well-being of the fowls, than all the "chicken powders" in existence.—*Poultry Monthly*.

Poultry Notes.

Better practical fowls, better general-purpose fowls, better laying fowls, better table fowls, better ornamental fowls—these are among the possibilities of the future.

The fact that it has the one or more qualities which no other fowl possesses, or possesses in a less degree, makes it the fowl of all others for certain people. They desire just these qualities, and if they were eliminated they would no longer care for the fowl. Argument with them would be useless. The fact that ninety other varieties were really superior to their one would not

convince them. They know, or think they know, which amounts to the same thing, just what they wish, and unless they can have that they will have nothing.

The best way to get rid of lice in the hen house is to thoroughly saturate every portion with strong boiling soapuds, first adding a pint of kerosene to every bucket of the suds. It should be forced into every crack and crevice, and also on the underside of the roof, as well as on the walls.

The Dorking is a better table fowl than the Leghorn, but the Leghorn will lay more eggs than the Dorking. The Brahma is a better fowl for the villager, but it lacks the beauty of the Game. The Hamburg is a wonderful layer, but its eggs are smaller and its body lighter than the Plymouth Rock.

The cost of a pound of pork is about 6 cents, while a pound of chicken costs about 8 cents; but the prices obtained for the chicken are so much greater that the profit is nearly twice as much as that on pork, which may be put down to the fact that the chicken is also a producer of eggs as well as of flesh.

The farmer or other poultry-raiser who keeps from fifteen to fifty fowls had better have nothing to do with incubators, but trust to hatching his chickens under hens. To do so economically, two hens should be set at the same time, giving all the chicks when hatched out to one hen and resetting the other on fresh eggs.

The White Leghorn is more delicate than her brown Italian sister. She runs to eggs in the summer, but when winter comes the dainty little thing stands around and shivers for fear her great, drooping comb will freeze. The plumage of the White Leghorn is a beautiful creamy white, while the comb and wattles are fiery red.

Brown Leghorns are the most beautiful of the Leghorn class. They are acknowledged to be the best layers in existence, laying, if properly bred, as large an egg as the Asiatics. They are of medium size, and non-sitters. Every feature connected with them is attractive and pleasing. They are great foragers, and in the summer, if given their liberty, need but little feeding. For the table the Brown Leghorn is unexcelled, the meat being delicate and sweeter than that of larger fowls.

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THE MARKETS.

By Telegraph, January 30, 1888.

LIVE STOCK MARKETS.

St. Louis.
CATTLE—Receipts 2,100, shipments 100. Market weak and lower. Choice heavy native steers \$4 40a5 20, fair to good native steers \$3 90 a 4 45, medium to choice butchers steers \$3 10a 4 00, fair to good stockers and feeders \$2 00a 3 25, ordinary to good rangers \$2 20a 4 10.
HOGS—Receipts 4,700, shipments 1,300. Market dull and 10a15c lower. Choice heavy and butchers selections \$5 60a5 70, medium to prime packing \$5 20a5 65, ordinary to good light grades \$4 95a5 25.
SHEEP—Receipts 2,300, shipments 1,400. Market firm. Fair to fancy \$3 70a 4 30.

Chicago.
The Drovers' Journal reports:
CATTLE—Receipts 12,000, shipments 4,000. Market 10a15c lower for all grades below choice. Good to fancy, \$4 60a5 20; steers, \$3 00 a 4 50; stockers and feeders, \$1 85a3 35; cows, bulls and mixed, \$1 50a3 00; Texas cattle, \$1 75a 3 30.
HOGS—Receipts 26,000, shipments 8,000. Market weak and 10a20c lower. Mixed, \$5 05a5 50; heavy, \$5 40a5 80; light, \$5 00a5 50; skips, \$3 50a 4 90.
SHEEP—Receipts 6,000, shipments 2,000. Market steady. Natives, \$3 00a5 50; Western, \$4 50a 5 10; Texans, \$3 00a 4 00; lambs, \$5 00a6 25.

Kansas City.
CATTLE—Receipts since Saturday 923. Market slow and weak for shipping and dressed beef steers, with values 10a15c lower. Cows steady to strong. Stockers and feeding steers quiet but firm. Sales ranged \$3 00a 4 30 for shipping and butcher steers.
HOGS—Receipts since Saturday 6,292. Market weak and 10c lower. Extreme range of sales \$4 00a5 45; bulk at \$5 10a5 20.
SHEEP—Receipts since Saturday Good muttons in demand at steady prices. Sales: 117 muttons av. 85 lbs. at \$3 75; 95 muttons av. 73 lbs. at \$3 12 1/2.

PRODUCE MARKETS.

St. Louis.
FLOUR—Steady and in fair demand, but unchanged.
WHEAT—Opened weak and in a fair market rallied 1/2c, and afterwards fell back, closing 1/2c below the opening. No. 2 red, cash, 80 1/2a 81c.
CORN—1/2c higher; trading fair. Cash, 46 3/4 a 47c.
OATS—Lower. Cash, 30 1/2c.
RYE—Nothing doing.
BARLEY—Firm at 80a97 1/2c.
HAY—Steady. Prime timothy, \$12 00a16 00; prairie, \$8 00a12 00.
EGGS—19 1/4c.
BUTTER—Firm and unchanged. Creamery, 24a30c; dairy, 18a26c.
Chicago.
Cash quotations were as follows:
FLOUR—Inquiry slightly improved; prices steady and unchanged.
WHEAT—No. 2 spring, 75 1/2a 77c; No. 3 spring, nominal; No. 2 red, 80c.
CORN—No. 2, 47 1/2c.
OATS—No. 2, 28a28 1/2c.
RYE—No. 2, 62 1/4c.
BARLEY—No. 2, 83a84c.
FLAXSEED—No. 1, \$1 46.
TIMOTHY—Prime, \$3 46a 2 47.
PORK—\$14 10a14 12 1/2.
LARD—\$7 42 1/2a 7 45.
BUTTER—Rather quiet but firm. Creamery, 22a23c; dairy, 18a23c.
EGGS—20a22c.

Kansas City.
WHEAT—Receipts at regular elevators since last report, bushels; withdrawals, 2,525 bushels, leaving stock in store as reported to the Board of Trade to-day, 350,843 bushels. There was a quiet and merely nominal market to-day on 'change, with no sales on the call of any of the different grades, either for cash or future delivery. No bids nor offerings either for rejected winter, No. 4 winter, No. 3 red winter or No. 3 soft winter wheat. No. 2 red winter wheat, none on the market. No. 2 soft winter, cash, January and February, no bids nor offerings; May, 80 1/2c bid, no offerings. On track by sample: No. 2 soft, cash, 81c.
CORN—Receipts at regular elevators since last report, 591 bushels; withdrawals, 1,103 bushels, leaving stock in store as reported to the Board of Trade to-day, 141,308 bushels. The market on 'change to-day was weaker but quiet, with no sales on the call either for cash or future delivery of any of the different grades. On track by sample: No. 2 cash, 44 1/2c.
OATS—No. 2 cash, no bids nor offerings. On track by sample: No. 2 mixed, cash, 31c; No. 2 white, cash, 32 1/2c.
RYE—No. 2 cash, no bids nor offerings.
HAY—Receipts 67 cars. Market weaker. fancy, \$9 50 for small baled; large baled, \$9 00; wire-bound 50c less; medium and poor stock steady.
OIL-CAKE—Per 100 lbs. sacked, f. o. b., \$1 25;

\$11 00 per 1,000 lbs.; \$20 00 per ton; car lots, \$20 00 per ten.
SEEDS—We quote: Flaxseed, \$1 25 per bu. on a basis of pure; castor beans, \$1 00 for prime.
FLOUR—Market fairly active and firm. Sales: 3 cars by sample at 95c. Quotations are for unestablished brands in car lots, per 1/2 bbl. in sacks, as follows: XX, 90c; XXX, \$1 06 a 1 05; family, \$1 15a 1 25; choice, \$1 50a 1 60; fancy, \$1 65a 1 70; extra fancy, \$1 75a 1 80; patent, \$2 05a 2 10; rye, \$1 40a 1 60. From city mills, 25c higher.
BUTTER—Receipts of roll fair and market steady. We quote: Creamery, fancy, 27c; good, 22a25c; fine dairy in single package lots, 16a20c; storepacked, do., 14a16c for choice; poor and low grade, 9a10c; roll, good to choice, 14a17c.
CHEESE—We quote: Full cream, twins, 13c; full cream, Young America, 13 1/4c.
EGGS—Receipts light and market steady at 22c per dozen for fresh.
VEGETABLES—Potatoes, home-grown, 70c per bus.; Utah, \$1 20 per bushel. Onions, red, 75c a \$1 00 per bus.; California, \$1 10a 1 20 per bus. Sweet potatoes, yellow, 75c per bus. Apples, supply fair and market steady at \$2 00a 3 50 per bbl.
BROOMCORN—Dull and weak. We quote: Green self-working, 4c; green hurl, 4 1/2c; green inside and covers, 2 1/4a 3c; red-tipped and common self-working, 2c; crooked, 1c.
PROVISIONS—Following quotations are for round lots. Job lots usually 1/2c higher. Sugar-cured meats (canned or plain): Hams 11c, breakfast bacon 10 1/2c, dried beef 9c. Dry salt meats: clear rib sides \$7 40, long clear sides \$7 80, shoulders \$5 65, short clear sides \$7 65. Smoked meats: clear rib sides \$8 15, long clear sides \$8 05, shoulders \$6 50, short clear sides \$8 40. Barrel meats: mess pork \$14 00. Choice tierce lard, \$9 75.
Topeka Markets.
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Eggs (fresh) per doz. 28
Beans, white navy, H. P., per bus 2 60
Sweet potatoes " " 90
Apples " " 1 00a 1 25
Potatoes " " 60a 95
Onions " " 1 00a 1 50
Beets " " 40a
Turnips " " 25a 35

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The Veterinarian.

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

CORNS.—Prof. Law, in his popular work, "The Veterinary Adviser," gives the following interesting advice in regard to corns on horses' feet:

Corns are at first simple bruises of that part of the sole included between the bars of and the wall at the heel, but later there is often an increased production of horn, and the formation of a horny tumor, which presses injuriously on the quick. In other cases the bruise causes active inflammation and the formation of matter which, if denied to escape below, will burrow toward the coronet or less frequently around the toe, and give rise to disease in the deeper fibrous network, the cartilage or the bone. In these last conditions it usually results as fistula or quitters. In other cases the corn is pared out as is supposed, but the heels, having lost their mechanical action of the sole, curl forward and inward, repeat the bruise continually, keep up the inflammation and what is equivalent to a sore in the heel. The irritation often produces absorption of the margin of the bone at the heels, with bony deposits above or below, and ossification (turning to bone) of the lateral cartilages, a condition which almost necessarily perpetuates the bruises or corns. Corns may exist in either heel, but are usually in the small or weaker one, and prevail above all in flat feet, with low, weak heels.

Symptoms.—Lameness, with a tendency to point, with the heel slightly raised when at rest, and a short, stilty, stumbling step when moved. Pinching the affected heel with pinchers and tapping it with a hammer causes wincing. If the shoe is removed and the heel pared out, the horn may be seen to be blood-stained, but unless this is seen on removing the flakes no one should allow curiosity to lead to a deeper search. If suppuration has taken place, the tenderness is extreme, almost causing the animal to keep the foot raised, and scarcely daring to touch the ground with the toe. A tenderswelling usually appears at the coronet above the affected heel, and pinching or hammering of the heel is unendurable.

Treatment.—If a recent bruise and uncomplicated, apply either a bar shoe or a common one, but rasp down the bearing surface at the heel, to avoid pressure, as advised for side bones, and place the affected feet in water, or keep the walls moistened with wet swabs, and the sole with oil meal or clay packing. When tenderness has subsided, smear the hoof with ointment and work carefully. Remove the shoe early enough to prevent pressure on that heel, and in preparing the foot retain the strength of that heel by preserving the elastic horn of the sole between wall and bar. Never allow this to be pared and weakened unless it be to evacuate matter or sand, or for the removal of a horny tumor.

If suppuration has taken place, pare down the heel until the matter escapes, remove all horn detached from the quick, and pare the horn around this to a thin edge; poultice until the surface is smooth, dry and not at all tender; then apply a bar shoe with a leather sole, and a stuffing of tow and tar, or crude turpentine (pitch pine). No pressure should be allowed on this heel until the sole has grown up to its natural level, as a support. Horny tumors may be removed by paring out and treating as above advised until the sole attains its natural growth. If old-standing corns are connected with death of a portion of the heel, of the foot bone, or ulceration of the lateral car-

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tilage, these must be scraped or cut off before improvement is to be expected. If connected with side bones they are liable to be kept up by frequent pinching of the quick between the bone and horn, and demand careful shoeing to avoid pressure on the heel.

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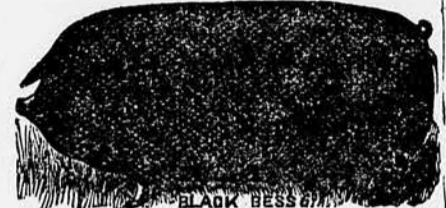
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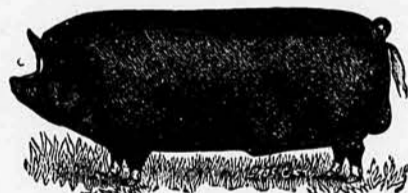
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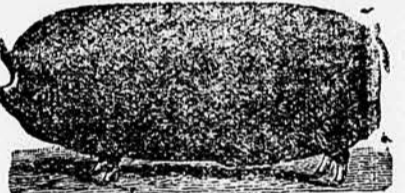
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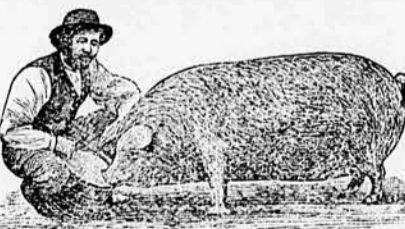
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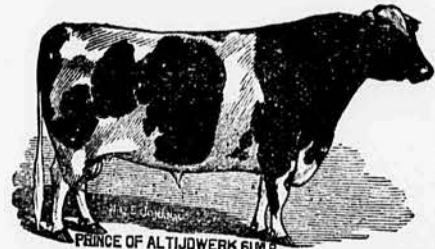


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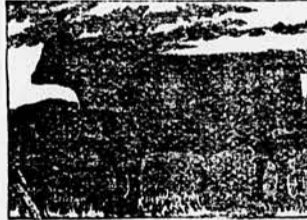
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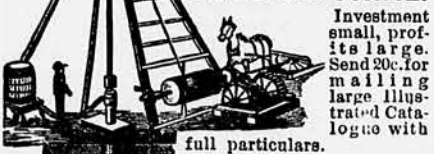


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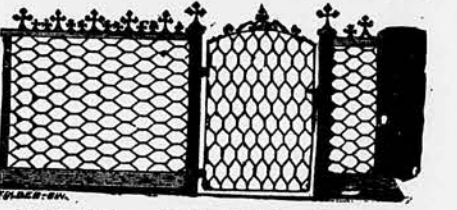
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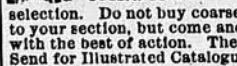
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