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Fruit in Washington County.

From the Washington (Kas.) Daily Register we gather some interesting points in a report of the proceedings of the Washington county Horticultural Society at a meeting held June 30. Apple blight on top branches was reported, and the remedy suggested was to cut the dead twigs away. One member, Dr. Williamson, claimed that where the dead branches are left the decaying sap passes into the circulation of the tree producing the same as pyemia, or blood poisoning, from a poisoned wound in the person, and that immature wood of late growth is liable to be winter-killed and is then called blight in the apple, as well as the pear. The remedy is to pinch or cut back growth and water sprouts, so that none but perfect wood goes into winter, also to avoid all late plowing of trees, that tends to produce a late growth.

Mr. Cummins reported apple root blight. Some of his bearing trees are dropping both fruit and foliage, the roots when uncovered appear to be decomposing and the bark slips. Some years ago this occurred in the eastern portion of the State, and the roots were examined expecting to find the cause parasitic but the conclusion in the premises, was that the severity of the previous winter was the cause.

Mr. Weakley reported a new apple—the Fourth of July—to be good. It is a good size, in color yellow, with red stripes.

The apple crop of the county will be about three-fourths of a full crop.

As to strawberries, Jersey Green, Crescent seedling, Wilson's Albany, the Vick, and Indiana Iron Clad have done best.

Among raspberries, the Turner, Gregg, Mammoth Cluster and Improved Doolittle did well.

As to cherries the report was, "Early Richmond, full; common Morella, full; May Duke light." Dr. Williamson said he has a seedling cherry of the Early Richmond which originated in Jefferson county, Kansas, that is early, a large cherry with small pit, bears every year, easily propagated from sprouts, as good or better than any budded variety I have on the farm.

With Mr. Weakley the Gov. Wood bears well. The Dye House cherry is recommended, it is raised extensively in Jackson county Mo.

Peaches not worth reporting. Apricots were recommended.

Grapes: Concord "loaded down;" other varieties a failure.

Kittatiny and Snyder blackberry canes full.

Close clay soil was recommended for pears. As to pruning this tree, he urged cutting back all water sprouts and heading back all immature wood in the fall so that the tree is strong enough to withstand the winter, recommends planting more pears. A few years ago when our land was wild, we often failed in fruit crops that are now a success. The climate changes, with cultivation, has tamed it.

No damage from insects reported. Increased attention is being given to floriculture. Annuals are doing well; roses full; Hybrids roses are a success, and the monthlies, when protected, can be kept over winter. Mrs. Penwell's green house has given quite an impetus to the cultivation of house plants, cut flowers, bulbous plants and shrubbery, and deserves as a home enterprise to be well patronized.

The officers of the society are: President,

Dr. Chas. Williamson; Secretary, Alex. Spier, of Linn; Vice President, G. C. Penwell; Treasurer, Wm. Cummins, of Mill Creek.

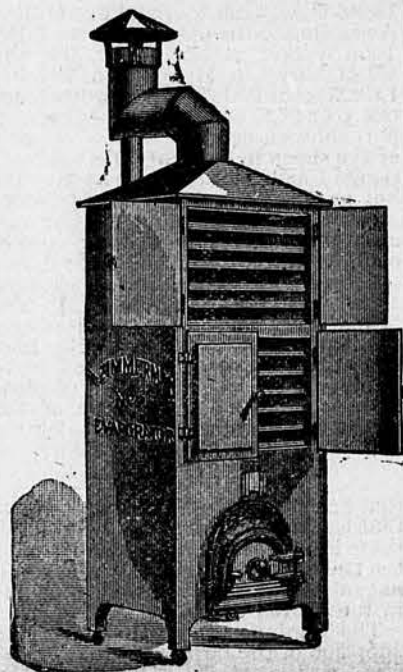
Sorghum for Fodder.

Our farmers are learning the advantages of feed in abundance. They need enough to have "plenty and to spare." There is no better feed than sorghum, and we fully agree with a contemporary in urging the sowing of sorghum seed on all spare land. Corn fodder, also, it says might be grown, but it takes a little longer season to grow a crop of corn than one of sorghum; and again, corn has been grown so long and persistently, and so much to the exclusion of other crops, that its peculiar enemies among weeds, insects and fungus growths that one is not so certain to get a crop of corn as of sorghum fodder. Why will farmers persist in growing the crops and following the methods they have been accustomed to, even after it has been abundantly demonstrated that other crops and methods will pay better? They continue to grow wheat, often at a loss, selling the grain and with it the fertility of their farms, grow some grass, but more corn, and if they feed the corn on the farm, depend for fodder on pasturing the stalk fields, with perhaps a portion of the field cut, or at best a comparatively small amount of timothy hay grown at the rate of one and a half or two tons per acre. More stock and less grain should be the farmer's motto.

"Many farmers think that to grow stock they must have a great deal of grain. In this they are mistaken. The best animals of all classes are those kept to the time of fattening on but little grain. With proper care and good nutritious fodder, a steer can be made to put on a pound of flesh a day all winter long without a pound of grain. If farmers then would so proportion their crops as to raise less of the costly grains and more hay and fodder, they could raise more and better stock and at smaller cost; and this method means besides, richer and more fertile farms.

"Now is a good opportunity to test this. If you have a wheat field that is not worth harvesting, turn it under, make it smooth and mellow, and while moist sow on from one to one and one-half bushels of sorghum seed per acre. It will start and grow slowly at first, but will soon begin to push ahead and grow faster than corn. It may be cut any time after it has made growth enough, though to get the best quantity and quality, cut soon after the seed has formed. It is usually cut and handled as is ordinary hay; but crops making such heavy growths as corn and sorghum make very heavy pitching. A better way, we think, is to cut with a self-rake reaper, starting in the morning as soon as the dew is off, letting the fodder lay in the gavel and wilt until nearly night, then turn, leaving the green surface to be exposed to the dews of the night. This will dry off very quickly in the morning, and, in good weather, will be ready to house by afternoon. In hauling, three rows of gavels should be pitched into one. Being in bunches it can be handled easier and faster than if mowed, raked up with a horse-rake, and badly tangled up. It may also be bound into bundles after drying, and is then in a very convenient form to handle until it is fed out. Those who will try a crop of sorghum fodder will be delighted with the quantity of feed they will get, and they will see how pleased their stock will be with the quality. We have never seen any better fodder for milch cows than nicely cured sorghum fodder."

Fruit Drying and Dryers.



The old method of drying fruit in the sun has always been objectionable on account of the various difficulties in the way of successful evaporation of a limited amount of usually inferior fruit product. This era of the fruit-drying business led to the invention of various fruit-dryers and evaporators, some of which were clumsy and dangerous, but after nearly twenty years in the manufacture, the improved evaporators of to-day are practically perfect.

The Zimmerman Fruit and Vegetable Dryer," of which the above is an illustration, appears to be constructed upon correct principles. This Dryer is made in several sizes. No. 2 is best suited to general use. No. 1 is of half the capacity; No. 3 is double the capacity, and only needed by those who dry on a large scale. No. 2 is 6 feet high, 2 feet deep, and 20 inches wide. Below is a furnace or stove for the fuel; this has a door at the front, and the fire is managed without opening the chamber of the Dryer. In the bottom are dampers to regulate the admission of the air, which, entering, is heated by contact with the furnace, then passes among the fruit, etc., and out through a covered chimney at the top; thus there is a continuous upward current, which, in the larger Dryers, is increased by so connecting the smoke pipe with the ventilating pipe that the ascending current from the furnace helps the upward draft. Trays or racks of galvanized wire are provided to hold the fruit, etc., and these rest upon ledges placed at the sides. The affair is readily portable, and may be used out-doors, or inside where it may be connected with a chimney. Experience proves, what an examination indicated, that this meets every requirement of a useful Dryer, and it completely obviates all the difficulties that attend the drying of fruit in the open air. The "Zimmerman," by allowing the drying to go on in wet weather, prevents the great loss attendant upon the old method, while the exclusion of light, of flies and dust, joined to the rapidity with which drying is done, removed the other obstacles to the best results. This Dryer turns out a product so superior in appearance, in color, and cleanliness, as to astonish those who

have never seen fruit properly dried, and so unlike the common sun-dried fruit as to warrant the different name that the "Zimmerman Dryer Company" have given to the product of their machines, i. e., "Evaporated Fruit." They claim that fruit thus prepared is worth in the market at least double that dried in the ordinary way; they give directions for attractive packing, and furnish a stencil plate with which to mark the boxes: "Zimmerman Evaporated Fruit." Not only fruits, but vegetables and other articles properly preserved by drying, are much superior when treated in this Dryer. Our experience, aside from fruits, is confined to sweet corn. Every housekeeper knows the great readiness with which green corn becomes sour, and how difficult it is in the most successful sun-drying, to prevent some acidity. With this Dryer the corn is in a short time put beyond the possibility of any change. The descriptive pamphlets, from which we clip this article, are to be had free. See advertisement in another column.

In the Mountains.

Dr. DeMotte, of the KANSAS FARMER Company, is rusticated during vacation. We have just received the following letter from him, written at Manitou:

MANITOU, COL., July 4, '85.

DEAR FARMER: Many of the readers of the FARMER will be seeking rest and recreation during the months of July, August and September. Some of them will turn their faces toward the grand old "Rockies." Of course Denver, the "Damascus of the West," will be the first objective point, and the Union Pacific will carry all who apply for passage from Kansas City to that point in twenty-two hours, thus almost eliminating time and space. Whoever visits Denver should see the charming little village of Manitou, nestled in among the hills at the base of Pike's Peak. And to reach that point the Denver & Rio Grande railroad offers the very best facilities. Three trains leave Denver for Manitou and points south each day; and a pleasanter ride one will seldom find. Skirting along near the foot-hills of the snow-capped range, with beautiful scenery near and far, the constantly changing views giving variety all the way, one is charmed, delighted and invigorated, and finds the journey a real rest. It was the good fortune of the writer of this paragraph to make the acquaintance of Mr. Stanley Wood, who has charge of the literary bureau of the passenger department of the D. & R. G. R. R. He is a man eminently fitted for his especial work and deservedly popular with all. Those wanting first-class accommodations at reasonable rates can safely take the free carriage awaiting the arrival of the train at Manitou and be landed at the Cliff House, where Mr. E. E. Nichols, the proprietor, and his efficient corps of assistants will attend to every want. Messrs. Hutchinson, Williams & Co. are always ready to accommodate the sight-seer with first-class livery upon a moment's warning. All this is said without solicitation on the part of any of the parties mentioned, but wholly in the interest of any friends of the FARMER who may visit that charming region.

It is useless to attempt a pen-picture of Manitou and its surroundings. The place must be seen to be appreciated. No one has "done" Colorado who has not spent a week at Manitou.

H. C. D.

The Stock Interest.

PUBLIC SALES OF FINE CATTLE.

Dates claimed only for sales advertised in the KANSAS FARMER.
October 28—Hon. T. W. Harvey, Burlington, Neb.
November 3 and 4—Inter-State Short-horn Breeders, Kansas City Fat Stock Show.
S. E. Ward & Son, Short-horns, first Friday of Kansas City Fat Stock Show.

The Sheep Outlook.

Read by G. H. Wallace, before the Missouri Sheep-Breeders' Association, June 17th, 1885.

The Declaration of Independence and the government under the same are, as they have been for the past one hundred years, the wonder and the admiration of the civilized world. The monarchies of the Eastern hemisphere looked at first with amazement upon the experiment of a government of the people, by the people, believing that their instability was such that this free government would soon fall to pieces, or into the hands of autocrats or dictators.

The great foundation stone upon which our liberties rest is an enlightened public opinion, and there will be no danger to our institutions while the people are intelligent and are permitted a free expression of their judgment.

This in the end has been and always will be for the right. The demagogue with his trumpet, bawling a catch word or phrase, may mislead, and for a time selfish views may prevail, but when calmly brought before the bar of public opinion, weighed in the balances and found wanting, they are soon disposed of, and truth, justice and patriotism take their place.

Assembled here to-day are the representatives of those who, in this great and central State, are engaged in raising one of the most essential of products for the comfort and welfare of the people, the safety of our common country. And we have met to consult how we may increase our efficiency as good citizens, increase the public comfort and welfare and add to the strength and stability of our government.

To those that may be disposed to carp and cavil at this declaration, permit me to say that it is not a mere matter of dollars and cents. Civilization dates from the time our forefathers doffed the fur and donned the wool. There may be a King Cotton, but wool is a General, whose services are indispensable to maintain King Cotton on his throne.

Experience is the great educator of mankind, and we can form a just opinion of the future only by a review of the past. Since the introduction into this country of the wool industry, to the present day, it has been subjected to various influences both for and against its prosperity. The sure barometer of statistics has recorded how and when those influences have been exerted.

Climate and soil have had their effect, and the various kinds and qualities of wool, like the roots of plants, have sought the soil and climate best adapted to their production.

During this time the ingenuity of man has devised new and improved means of transportation, so that Ohio and Pennsylvania came into competition with older New England, Michigan with New York, Missouri, Kansas, Colorado and Texas with the Eastern States, and far-away California and Oregon stand upon a nearly equal footing in the markets of the country. Under the one flag, the one indivisible government, where, if the conditions and surrounding circumstances were not satisfactory every man was at liberty to seek in other sections those which should be more congenial. The East has said to the West, "Well and good; we rejoice at your success." The development of one section has furnished incentive and employment to the others. There should be and there really is, no antagonism between the sections of our country; rivalry, yes, but antagonism—never. The hot words of the Chicago Times, in answer to the sentiment expressed at the meeting of our National Association, predicted that the East would yet demand protection from Western wool, and in this shows only its ignorance, which may be willful.

There is no pretense, among eastern sheep raisers, that their wool pays cost. It is only by a ready market in the West and Southwest for their thorough-breds that their industry can live, and it is only by the importation of this blood from the East that the West and Southwest are as successful as they are

in raising wool in both quality and quantity.

But these cheapened means of transportation have gone out over the world's free highways—the oceans—and brought us into competition with the ends of the earth. This foreign competition beats heavily upon us, and this fact has been recognized from time to time by our law-makers and executives, who have placed and enforced restrictions upon it in the shape of tariff laws. By referring to the statistics we will find that under the legislation of 1867 the production of wool in the United States was fostered by a tariff that balanced the many inequalities existing against us, and the number of sheep and product of wool greatly increased, and yet no one can point to any one section or individual that was being enriched thereby. The increase in numbers of sheep was proportional throughout the country, and the number of flock-masters increased more in proportion than the sheep. Under the act of 1883, reducing the tariff, what is the result? In 1882 the number of sheep in Texas, in round numbers, was eight millions; the number by the State assessment for 1884-5 is between four and five millions. According to the official report of Hon. John Walker, State Auditor, the number of sheep in Missouri in 1883 was 1,692,700; in 1884, 1,542,514, a decrease in one year of 10 per cent. The same report shows a decrease in the valuation of the sheep in hand of \$138,826.26. I regret I have not the report for 1885, but I am advised that it would show a greater decrease in numbers and valuation than the previous year. And if I could give you the official figures from other wool-growing States, they would show a similar condition. In fact, nearly every delegate to the meeting of the National Association in St. Louis last month, reported a decrease in the number of flocks and number of sheep. The estimated amount of clip of 1885, by the best authorities is far below that of 1884, but I need go no further.

EVERY SHEEP BREEDER

that has sheep to sell, and wool-grower that has sold his clip for 1885, knows there is depression and stagnation in the trade. Is this right while we do not raise the amount of wool consumed in the United States?

The argument used to secure the adoption of the tariff reduction of 1883 was that the act of 1867 placed the tariff higher than was necessary, etc. The reduction made was from 1½ to 4 cents per pound, which would seem like a small amount, but under the stimulus of the reduction importations of foreign wool have doubled. This with the home product, has made the supply larger than the demand, and the result has been to depress prices 40 per cent. Can it not be seen then that it was by but a small margin that the tariff of 1867 made sheep husbandry in the United States profitable? Are we unreasonable and altogether selfish when we ask for its restoration? General Frost, in responding to a toast at the banquet given the National Association of Wool-Growers by the generous merchants of St. Louis, said: "I am a free trader, and believe if we cannot grow wool as cheaply in this country as it can be done in other countries, then we should go there for our wool, and turn our attention to something else." Now, it is freely conceded by the wool-growers, that owing to the price of land, amount of taxation, rate of interest, cost of labor, and particularly the rigor of our climate such is the fact, and in accordance with this free trade theory, the grass and grain fed to the fifty millions of sheep in this country should be fed to something else, our flocks sold for what they would bring for the flock, or killed for the pelt as has been done in times of depression before this and we should make ourselves dependent upon foreign supply. Now without a word as to the justice of thus sacrificing the three or four hundred million dollars worth of property belonging to the one million flock-masters of the country, or as to the probability of the continuance of the supply of cheaper wool from foreign sources, after they have gotten us within their grip,

I WILL ASK THE FREE TRADERS, and especially Gen. Frost, whose experience should have taught him, that a naked soldier is of little use in the event of war with any foreign power, I ask how should we clothe the "living wall" that would spring to the defense of our country? There would be courage, there would be devotion, but without food and clothing there would be no endurance. Wool is, therefore, one

of the essentials to the strength and stability of our government. As well might it be said that, as the great Krupp has become able, under the fostering care of the German government to manufacture ordnance cheaper than can be done elsewhere, that we should buy our cannon of him and throw away our furnaces, our forges and machinery. Those sections of the world that buy their ordnance, rank far below first-class and so do those that must buy their wool, until the day shall come for "beating swords into plowshares and spears into pruning hooks." If the United States would be great among the nations, she must possess within her borders all the essentials to make her so, and not the least of these is a sufficient number of sheep to supply her demand for wool.

What is the outlook? Let not him who has faith in the stability of our institutions fear for the future. Let the people know the truth and their patriotism will demand that we be protected, at least sufficiently to enable us to supply our home market with an article so requisite for the stability and integrity of our country. Their motto is: In time of peace prepare for war.

Another argument used to secure the reduction in '83 was, that this excessive—mark the language gentlemen—the excessive protection of the interests of the flock-masters, made the woolen clothing of the balance of the people of the country cost just that much more than it should. Short-sighted and fallacious reasoners, we ask you where has there been a reduction in the price of clothing in proportion to the decline in wool? According to the demonstration of Hon. Geo. L. Converse, that champion of our cause, in the halls of Congress, the effect of the act of '83 was a loss to the wool-producers of ninety millions of dollars in the past three years in addition to the depreciation in value of our flocks, and we ask where or in what manner have the people been benefitted thereby? There has not been sufficient decline in clothing to induce the merchant to "mark down his shop-keepers."

The American people are a thinking and reasoning people, and when they see that the result has been to destroy us, without a benefit to the country at large, their sense of justice will demand a restoration of the tariff of '67.

Upon this question the political parties of the country are divided among themselves. Democrats and Republicans stand shoulder to shoulder, both for and against protection, and it is no longer an issue between parties, and he who favors protection to the wool industry and demands from his representative in the U. S. Congress that he labor and vote for such protection, is not either a Democrat or a Republican, but a patriot.

While I cannot point to the horizon of the future, bright with

THE PROMISES OF BETTER TIMES,

or even a living for our business to the wool-grower, I would say go from here and cull from your flocks all those sheep that give the least return for the labor and care expended upon them, dispose of them as best you can, the first loss will be the least. And from those remaining, by judicious selection in breeding, by increased and careful effort produce wool which in length and strength of staple, fineness and brilliancy of fibre, shall deserve that for which we ask. When the better time comes, the present destruction of flocks will work to the benefit of the breeder that has bettered the constitution, increased the efficiency and maintained the purity of his flock. One word more, and in it is the brightest ray of hope I can offer for the Western wool-grower. Heretofore the transportation of our products to the markets of the country, the heavy commissions charged and the many "ages" demanded, with the uncertainty of time when returns would be received, have crippled us. I am glad to be able to say,

THROUGH A PERSONAL EXPERIENCE, all this has been changed. The merchants of St. Louis have awakened to the fact that their city is nearly in the center of the wool-producing territory, and that it should be the great depot in which the wool of the country should be handled. To bring this about, they have perfected such arrangements with the cotton interests of the city as to give them the finest warehouses in the world for storage, and the charges for this is fixed. Sales are by public auction, and for cash, so that quick returns can be made. The commission is 2½ per cent., which this year amounts to about one-fourth that is exacted by

Eastern houses. Their quotations have been kept well up with the other markets of the country, and the result has been to give the producer from one to one and a half cents more per pound for his wool than he would have realized had it been shipped to the East. They deserve success, and I trust will receive the support of the wool-growers of Missouri.

A Chapter on Calves.

I think one of the pleasantest tasks on the farm is that of raising calves. There is very much solid enjoyment to be derived from feeding them night and morning, caring for them daily, and seeing them grow every hour in the day. The first pleasure that the intelligent farmer experiences in calf-raising is in the selection of the calves to be raised. Some farmers must of necessity select those from their best cows for this purpose. When the millennium dawns upon our agriculture this precaution will not be necessary; the cows kept by the farmer will all be equally excellent. Until then it will be desirable, even in the best of dairies, to select with great care the mothers of the future cows of the dairy. Of course it is desirable to have strong, lusty calves, and this is very much a matter of previous care of the cow while in calf. All breeding animals, whether cows, mares, or ewes, should be fed with a view to the proper performance of the generative functions. An animal that is half starved shows this treatment in her own condition. The breeding animal that is insufficiently fed is starved, and through her the offspring becomes poorly developed and is born weak and puny. On the other hand, overfeeding of a breeding animal is productive of excessive fat, and the offspring in this case also is born weak and puny.

A middle course is the only safe and judicious one, and to this end a breeding animal should be fed sufficient nutritious food to sustain a moderate degree of good flesh and preserve perfect health and vigor. Following this course the calves will all be dropped strong and healthy. I have intimated that in selecting calves it is desirable to select those from the best cows. In making this selection several questions require careful consideration. If the farmer sells milk to city customers, and is not too conscientious in regard to the quality of milk furnished, then the one that gives a large amount of milk during a long season is the ideal cow. The fact that an animal that gives a large mess of milk sometimes gives an article of poor quality is no drawback. The absence of an undesirable, or rather an unnecessary, quality in the cow is not considered as making her less valuable. It is settled then that certain farmers will select calves dropped by their heaviest and most persistent milking cows, even if they are deficient in other highly desirable qualities. It is well to understand, however, that the cows that milk heavily and persistently make a very good starting point for the foundation of a good working dairy. It is a very good thing to know the exact value of a cow for dairy purposes ere selecting the calves that may be dropped by such a cow for future use in the dairy. The value of a cow may be determined fairly well the previous season. It is not so very much trouble to churn the milk of one separate from the rest for a week when it is desired to learn what the cow is really good for. The churn test will determine the quality, and a little observation of the flow of milk and the length of season during which she continues to give milk is amply sufficient to determine which is relatively the best of the herd. Every farmer running a dairy upon which he relies for his livelihood should make every season at least as thorough an examination of his herd as that which I have suggested. At least a calf should not be reared from any cow of whose quality or value the farmer is in any degree ignorant. The owner of a herd of native cattle need pay no attention to the color of his calves. He can eschew the mixed switches desired by Devon breeders; he is not confined to the "red, white, and roan," of the Short-horn men; nor yet does he care whether his calves come broken or solid colored. With the owner of a herd of native cattle a good cow cannot be of a bad color. The owner of a native-bred cow having selected the cow from which he is to rear a calf, then there is nothing about the calf itself apparently that makes it more or less valuable. With thrifty farmers it really makes but little difference what

time the calves come. Farmers who have not warm and comfortable stables for their stock and do not make a practice of keeping the cow during calving time in a separate box-stall are liable to loss and annoyance if the calves come during the severe cold weather. I have seen too many calves with tail shortened and ears cropped by frost-bites not to appreciate the importance of warm quarters for the young ones. It is an essential prerequisite to their welfare that they should be kept in some place warm enough to effectually prevent the possibility of being chilled at any time. The first duty the farmer owes to the newly-dropped calf is to see that it becomes well dried. The cow usually licks it dry as soon as she gets on her feet, but it is very often advisable to supplement her efforts in this respect. A few old fragments of cloths, and a few minutes' brisk rubbing, will add very much to its immediate comfort.

The first care of the attendant should be to see that the calf becomes strong and retains its strength. In accomplishing this purpose the cow should be kept in warm quarters until the calf is dropped, when it should be dried thoroughly and well at once and then got upon its feet and allowed to suck as soon as possible. With a very little of the proper sort of care at the right time—that is as soon after the calf is born as possible—the calf will grow strong and lively in a very few days from its birth. The owners of herds of pure-bred fancy cattle may rear their calves in a "gilt-edge" manner, but at the same time it should be remembered that a large majority of calves reared annually are scrubs and that to these care and comfort is just as essential as to calves of more aristocratic breeding. The value of scrub calves when reared and the value of milk for cheese and butter-making operates to prevent the rearing of calves on new milk. To leave aside the question of whether or not it would pay to rear a calf on its mother's milk is unnecessary to discuss, for the reason that but few farmers could be brought to adopt the practice. Then the next consideration is as to the best manner of feeding. The object is to keep the calf growing; then that being the case any course that will not answer this purpose must necessarily be at fault. Without a doubt the most natural method of raising calves is on the mother's milk. Calves so fed are fatter, grow faster, and look more sleek and vigorous than when fed in any other way. Any one who has ever dined on veal fattened for six weeks on new milk will bear witness to the delicious quality of such flesh. The mother's milk is the natural food and generally the safest for the calf. There are exceptions to this rule, as I have found to my cost. Jersey cows will sometimes give milk too rich to answer the requirements of the young calf; when it is the case it is apt to be manifested by scouring, which may become chronic and result in the loss of the calf. In regard to the milk of Jersey cows, a medical friend of mine asserts that it is wholly unfit and dangerous as an article of food for infants. The practice I have adopted in feeding is as cheap and practicable as any. I allow the calf to suck its mother until her milk becomes good, when it is put on milk from which a portion of the cream has been removed. Blue skim milk is too poor for even a poor scrub calf. When they acquire age and the number kept renders it impracticable to pay much attention to the food of each individual calf they are all fed skim milk alike, in which is stirred a handful of ground oats previously cooked. When I turn calves out in the pasture I provide a trough in which is kept at all times a mixture of bran and ground oats. Calves usually come so that they must be kept a long time before they can be turned out. They should be kept in a warm, roomy and well lighted place, and the floor always well covered with good, clean straw. Calves should, when possible, be allowed to run loose, but if they manifest any disposition to suck each other they should be tied by means of a rope or chain and a neck strap. The profit in rearing calves consists in doing it cheaply and in the results obtained. No economy should be practiced that will result in poor calves, and nothing can be afforded that is not actually necessary to the production of good ones. They should be watched carefully all the time to guard against disease or accident; should be well fed to insure growth and good condition.

I have found considerable trouble

in guarding against scours. Just as soon as I discover any tendency in that direction I change the feed; a very slight change is usually sufficient to answer the purpose. Hay tea makes a good substitute for milk in feeding. It is equally nutritious and a good thing for the calves. As soon as the weather will admit they should be removed from the barn or stable to some small field or pasture, where they should be kept separate from the other stock. I usually fence off some small portion of a meadow near the house for a calf pasture, as it is advisable to have them close to the house for many reasons. The labor of carrying milk twice a day for feeding is a task which should be made as easy as possible. An easy method of feeding a considerable number of calves at one time is to feed in a trough. They should be fed in a trough with care, or some will get more than a fair share and certain others will fall short. Calves will soon learn to eat grass; in the meantime, however, it is a good thing to keep another trough near the feed trough, containing a small quantity of meal and bran. It is a small precaution to take, but the calves soon learn to look for the ration of grain, and I think it is highly beneficial. They should have access at all times to plenty of good, pure water, as milk twice a day will not supply their wants in warm weather. Some farmers who may read these suggestions may have an idea that the matter is an unimportant one. I know that on a great many farms the calves receive but slight consideration, and that they become good cows is more good fortune than good management. Farmers who fully understand the importance of properly attending to the young stock on the farm and give to the calves the attention they require have but little trouble in making a success of rearing calves. I repeat that it is one of the pleasant tasks on the farm.—*Forest K. Moreland, in Breeder's Gazette.*

Use Mica Axle Grease, the best made.

The old proverb—"A watched pot never boils"—has been improved by the addition of—"but an unwatched pot boils over."

Consumption, Coughs and Colds cured by Dr King's New Discovery. Trial bottles free.

Some fruit-growers claim that alternate rows of pine and fruit trees prevent the moth and other destructive insects from injuring the fruit. The strong odor of the pine is obnoxious to a great many kinds of insects.

Buckwheat and turnip seed for sale at the Topeka Seed House. Address S. H. Downs, Topeka, Kas.

Plantain, dandelion and other weeds in a lawn may be destroyed by placing a little sulphuric acid with a stick in the crown of each plant. The acid should be carried in an open-mouthed bottle with a long handle, so that fingers and clothes are protected.

T. E. Bowman, Topeka, makes loans on good farm securities, at moderate rate of interest and no commission. Correspondence solicited.

In California they have a remedy for lice on stock composed of an ointment of equal parts of lard and snuff. It is not applied to the entire body, but a ring of it, two or three inches wide, completely around the neck, has the desired effect.

Save time and money by using Stewart's Healing Powder for cuts and sores on animals. Sold everywhere, 15 and 50 cts. a box. Try it.

Animal matter, meat scraps or bone chopped up may be fed to poultry at any season, judiciously, to good advantage. There must, however, be no excess of this food. Bone meal, mixed in small quantities with soft food, is very good for chicks.

Mann Boudoir Cars.

The Wash is now running the celebrated Mann Boudoir cars between Kansas City and Chicago. This is the only line running these cars in the West.

A South Carolina correspondent wrote to the Columbia Herald about a ham which his wife had hidden during the war to keep it away from Yankee soldiers. It was overlooked some way in the dark place until this year, when it was found by accident, and was perfectly sweet and sound except that it was a little mouse-eaten. "This ham of bacon," he says, "has been only partially covered twenty-two years. It was put there in the summer of 1863 to keep the Yankees from getting it. It was well cured and canvassed before it was stored. When found, the sack and the string with which the sack was tied, were nearly entirely decayed."

BREEDERS' DIRECTORY.

Cards of three lines or less, will be inserted in the Breeder's Directory for \$10.00 per year, or \$5.00 for six months; each additional line, \$2.50 per year. A copy of the paper will be sent the advertiser during the continuance of the card.

HORSES.

FOR SALE—On good terms, two imported Clydesdale Stallions, with books of 1885 included. Both sure breeders. Can see their colts. For particulars address Robert Ritchey, Peabody, Kas.

THE IMPORTED CLYDESDALE STALLION—"KNIGHT OF HARRIS" (No. 995 Clydesdale stud book), will stand this season at the stable of the undersigned, three miles west of Topeka (Sixth St. road). He is one of the best Clyde horses in America. Sire Chieftain; grandsire, the great show stallion Topman. To insure, \$25. H. W. McAFEE.

CATTLE.

ASH GROVE STOCK FARM.—J. F. Glick, Highland, Doniphan county, Kansas, breeds first-class THOROUGHBRED SHORT-HORN CATTLE AND POLAND-CHINA SWINE. Young stock for sale. Inspection and correspondence invited.

WALNUT PARK FARM.—F. Playter, Walnut, Kas., breeds the largest herd of Short-horn Cattle in southern Kansas. Stock for sale. Cor. invited.

JOHNSON & WILLIAMS, Silver Lake, Kas., breeders of Thoroughbred Short-horn Cattle. The herd numbers thirty head, with a Rose of Sharon bull at head.

OAK WOOD HERD, C. S. Eichholtz, Wichita, Kas. Live Stock Auctioneer and breeder of Thoroughbred Short-horn Cattle, Poland-Chinas & Brnz Trkys.

DEXTER SEVERY & SONS, Leland, Ill., breeders of Thoroughbred Holstein Cattle. Choice stock for sale, both sexes. Correspondence invited.

CEDAR-CROFT HERD SHORT-HORNS.—E. C. Evans & Son, Prop'rs, Sedalia, Mo. Youngsters of the most popular families for sale. Also Bronze Turkeys and Plymouth Rock Chickens. Write or call at office of Dr. E. C. Evans, in city.

T. M. MARCY & SON, Wakarusa, Shawnee county, Kas. We now have 116 head of recorded Short-horns. If you wish a young bull or Short-horn cows do yourself the justice to come and see or write us.

BROAD LAWN HERD of Short-horns. Robt. Patton, Hamlin, Kas., Prop'r. Herd numbers about 120 head. Bulls and Cows for sale.

ALTAHAM HERD. W. H. H. Cundiff, Pleasant Hill, Cass Co., Mo., has fashionable-bred Short-horn Bulls for sale. Among them are two Rose of Sharoons and one aged show bull. None but the very best allowed to go out from this herd; all others are castrated.

U. P. BENNETT & SON, Lee's Summit, Mo., breeders of THOROUGHBRED SHORT-HORN CATTLE, Cotswold sheep, Berkshire swine, Bronze turkeys and Plymouth Rock chickens. Inspection invited.

POWELL BROS., Lee's Summit (Jackson Co.), Mo., breeders of Short-horn Cattle and pure-bred Poland-China Swine and Plymouth Rock Poultry. Stock for sale. Mention this paper.

W. A. POWELL, Lee's Summit, Mo., breeder of the Poverty Hill Herd of Thoroughbred Short-horn Cattle. Inspection and correspondence solicited.

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

CATTLE AND SWINE.

COTTONWOOD FARM HERDS, J. J. Malls, Manhattan, Kansas, Breeder and shipper of SHORT-HORN CATTLE and BERKSHIRE SWINE. Orders promptly filled by express. The farm is four miles east of Manhattan, north of the Kansas river.

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

SHORT-HORN PARK, containing 2,000 acres, for sale. Also, Short-horn Cattle and Registered Poland-China. Young stock for sale. Address B. F. Dole, Canton, McPherson Co., Kas.

GLENVIEW FARM. G. A. Laude, Humboldt, Kas., breeds Short-horn Cattle and Poland-China Swine. Also Saddle and Harness Horses.

I HAVE 10 young pure-bred Short-horn Bulls, 10 Cows and Heifers, a few choice Poland-China Boars and Sows—the latter bred for sale. Send for new catalogue. H. B. Scott, Sedalia, Mo.

H. S. FILLMORE, Green Lawn Fruit and Stock Place, Lawrence, Kas., breeder of Jersey Cattle, Poland-China and Berkshire Swine. Stock for sale.

WOODSIDE STOCK FARM.—F. M. Neal, Pleasant Run, Pottawatomie Co., Kas., breeder of Thoroughbred Short-horn Cattle, Cotswold Sheep, Poland-China and Berkshire Hogs. Young stock for sale.

SWINE.

CATALPA GROVE STOCK FARM. J. W. Arnold, Louisville, Kansas, breeds Recorded

POLAND-CHINA SWINE and MERINO SHEEP. The swine are of the Give or Take, Perfection, and other fashionable strains. Stock for sale in pairs not related. Invite correspondence or inspection of stock.

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

OUR ILLUSTRATED JOURNAL.—A full and complete history of the Poland-China Hog, sent free on application. Stock of all ages and conditions for sale. Address J. & C. STRAWN, Newark, Ohio.

F. M. BOOKS & CO., Burlingame, Kas., importer and breeders of Recorded Poland-China and Large Berkshire Swine. Breeding stock the choicest from the best herds in seven States. I have special rates by express. Write.

J. A. DAVIDSON, Richmond, Franklin Co., Kas., breeder of POLAND-CHINA Swine. 170 head in herd. Recorded in A. and O. P.-O. R. Call or write.

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

POULTRY.

ONE DOLLAR per thirteen for eggs from choice Plymouth Rock fowls or Pekin ducks. Plymouth Rock cockerels \$2 each. Mark S. Salisbury, Box 931, Kansas City, Mo.

NEOSHO VALLEY POULTRY YARDS.—Established, 1870. Pure-bred Light Brahmas, Partridge Cochins, Plymouth Rocks. Eggs in season. Stock in fall. Write for prices. Wm. Hammond, box 190, Emporia, Kas.

N. R. NYE, breeder of the leading varieties of Choice Poultry, Leavenworth, Kansas. Send for circular.

W. M. WIGHTMAN, Ottawa, Kansas, breeder of high-class poultry—White and Brown Leghorns and Buff Cochins. Eggs, \$2.00 for thirteen.

EGGS FOR SALE.—From Light Brahmas, Buff Cochins and Plymouth Rocks, 13 for \$1.75; 26 for \$3. Also Pekin Duck eggs, 11 for \$1.75; 22 for \$3. Also Emden Geese eggs, 6 for \$2; and Bronze Turkey eggs, 12 for \$3. W. J. McCollm, Waveland, Shawnee Co., Kas.

J. M. ANDERSON, Salina, Kas. Bronze Turkeys, Plymouth Rocks, Pekin Ducks, Shepherd Puppies and Jersey Cows and Heifers. Write for prices.

FAIRVIEW POULTRY YARDS. Write postal for price list of fowls and eggs. Six varieties. Mrs. Geo. Taggart, Parsons, Kansas. Lock box 754.

PLYMOUTH ROCK CHICKENS. Eggs for hatching, from the finest breeding pens in the United States. Fowls have taken first premium wherever shown. Eggs safely packed for shipment. Setting of 13, \$2.50. Fowls for sale in the fall. Address E. W. Stevens, Sedalia, Missouri.

MRS. T. W. RAGSDALE, Paris, Mo., breeder of Light Brahmas Chickens and Bronze Turkeys—the best. Eggs, \$2.50 for 13.

GEO. H. HUGHES, North Topeka, Kas., 14 first prizes (Felix and Pierce, judges,) on W. F. B. Spanish & P. Rocks. Eggs, \$3 for 13; 26 for \$5. Prepared shell, 100 lbs. \$3. 12 egg baskets, 90 cts. Poultry Monthly, \$1.

MISCELLANEOUS

OSWEGO TILE FACTORY.—H. C. Draper, Prop'r., Oswego, Kas. Best shipping facilities over Missouri Pacific and Frisco railroads. Write for prices.

S. A. SAWYER, Manhattan, Kas. Live Stock Auctioneer. Sales made in all the States and Canada. Good references. Have full sets of Herd Books. Complete catalogues.

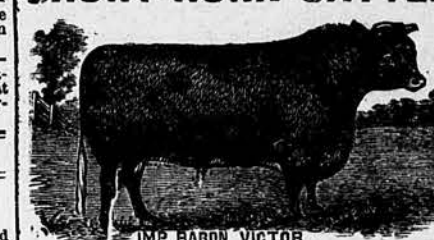
REPUBLICAN VALLEY STOCK FARM.—Henry Avery, Wakefield, Clay Co., Kas., breeder of Percheron horses. Stock for sale. Send for catalogue.

MERINO SHEEP, Berkshire hogs and fifteen varieties of high-class poultry of the best strains. Bucks a specialty. Harry McCullough, Fayette, Mo.

PROSPECT FARM.—H. W. McAfee, Topeka, Kas. For sale cheap 15 registered Short-horn bulls, 1 to 3 years old. Also, Clydesdale horses.

THE LINWOOD HERD

SHORT-HORN CATTLE

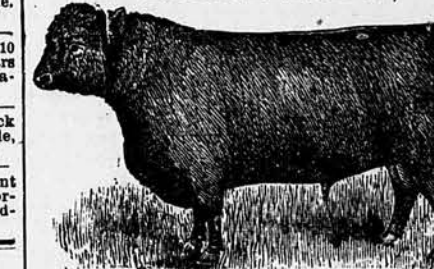


IMP. BARON VICTOR

W. A. HARRIS, Linwood, Kansas.

The herd is composed of VICTORIAS, VIOLETS, LAYENDERS, BRAVITY BUDS, SECRETS, and others from the celebrated herd of A. Cruickshank, Sittytown, Aberdeenshire, Scotland. GOLDEN DROPS, and URS, descended from the renowned herd of S. Campbell Kinellar, Aberdeenshire, Scotland. Also YOUNG MARY, YOUNG PHYLLIS, LADY ELIZABETH, etc. Imp. BARON VICTOR 42524, bred by Cruickshank, and Imp. DOUBLES GLOSTER head the herd. Linwood, Leavenworth Co., Kas., is on the U. P. R. R., 27 miles west of Kansas City. Farm joins station. Catalogues on application. Inspection invited.

F. McHARDY,



Breeder and Importer of

GALLOWAY CATTLE,

Emporia, : : : Kansas.

My herd numbers over one hundred head, consisting of the best and purest strains of blood. It is composed of animals bred by the most noted breeders of Scotland—the Duke of Buccleuch, the Earl of Galloway, Thos. Bliger & Sons, Cunningham, Graham, and others. I have thirty head of young bulls, fit for service, sired by the noted bull MacLeod of Drumlanrig; also thirty high-grade females of different ages that I will sell reasonably. Time given to suit purchaser, if desired.

CURES ALL OPEN SORES, CUTS FROM BARBED WIRE FENCE, SCRATCHES, KICKS, CUTS, &c. Sold Everywhere. 15 & 50 cts a box. Try it. STEWART HEALING POWDER CO., ST. LOUIS.



Correspondence.

Notes From Allen County.

Kansas Farmer:

I see a number of reports in your paper concerning the web worm. I am no entomologist and am not able to name them but think web worm is very appropriate, as they seem to leave a web wherever they go, and as soon as they begin to eat a plant they cover it over with their web. They have damaged the corn badly in some localities and can be found in nearly all fields. Our corn is very late this season; some are not done planting yet and this is the 2d day of July. The wet weather interfered with plowing in the spring, and then bad seed caused nearly all to have to plant twice and some as many as four times.

Oats looks well and grass is very fine. Clover will yield from two to three tons per acre. Fruit trees and small fruits are making fine growths. Apples, grapes and plums promise a good crop.

We are having an abundance of rain, so much that farmers can't cultivate half the time, consequently the weeds are getting the start of some. Stock of all kinds looking well. Long live the KANSAS FARMER.

Moran, Allen county.

W. H. C.

Crops in Rice County.

Kansas Farmer:

Taking 100 as the standard, the condition of the wheat crop is not over 50, winter rye 90, oats 75, Irish potatoes 90, pasture 95, corn 100. There is an immense crop of corn planted, and though the season was late, it is now beyond the highest expectations in thriftiness and size.

In April and May our apple crop promised to be large, but during the present month nearly all have dropped off. The same may be said of plums, pears and cherries. The cause may be traced largely to the work of insects.

The web worm has also made its appearance and is doing some harm to tender garden vegetables. Our strawberry crop was light, but the raspberries and blackberries show a full crop.

The "streaked cottonwood beetle" is doing great damage in some of our cottonwood groves. The second crop is now hatched out, which promises to defoliate the leaves.

Several patches of orchard grass seeded down last season have just been harvested. The results of this experiment have been very satisfactory thus far. This grass will no doubt soon take the place of our prairie grass for pasture. Other tame grasses have been sown with varying results. Alfalfa has probably come to stay with us. We hear of several very fine patches of red clover. Farmers are in good spirits and show evidences of thrift throughout the whole county. Our commercial, mechanical and educational interests reflect back the same signs.

Sterling, Rice county, June 30th.

From Cowley--Crops--Web Worm.

Kansas Farmer:

I wrote you last week of the presence of the web worm in the cornfields of some portions of this section of the State, but stated that its ravages were not very extensive nor likely to become very general. Since then, however, this pest has spread itself over the entire country and has been doing a great deal of damage to corn and most all other crops, including tomatoes and potatoes. The injury has been to young crops that were not far advanced, such as were succulent and tender; hence an easy prey to the voracious little plunderers. Corn well advanced seemed to be too tough for them and was avoided, but small late-planted corn has been almost wholly destroyed. The same may be said concerning their raids on crops in general and weeds even have been devoured by them. It is said by farmers that this worm has been known here nearly every year but in small numbers and has confined itself to the weeds altogether and not harmed crops. This worm is small, being about one-half of an inch in length, of a bright green color, very lively and voracious. It grows rapidly, acquiring a size of one and one-half inches in length, and resembles the cabbage worm very closely, but unlike it covers everything it attacks with a web; hence its name--web worm, I suppose. It probably

has a scientific name, but I have not taken the trouble to look it up and few of the readers will care anything about that. It is about through with its work of destruction now, and the damage done to crops, though considerable, is not as great as many anticipated. Frequent heavy rains have checked its work somewhat.

The wheat harvest in this locality is well advanced and the crop will be a good average one. Some fields are very light, but others are equally heavy.

The early-planted corn is doing finely and a good crop is indicated. REPORTER.
Winfield, Kas.

Letter From Illinois.

Kansas Farmer:

The Fourth of July this year finds the farmers of central Illinois fairly started with wheat harvest and haying. Owing to winter-killing the yield of wheat will not be great. The grain stands thin on the ground, the straw is light, weeds in many places being abundant, yet the heads are well filled and if favorable weather continues the quality of grain when ready for market will be rather better than an average.

The meadows, timothy and clover mixed and timothy alone, are producing well. The growing corn has been gaining rapidly of late on the time lost from backward season and the necessity of more replanting than had been usual.

Since the late Jersey sales at Indianapolis, Ind., and Springfield, Ill., people seem to think the bottom has about fallen out of the Jersey business and that prices have reached a point at which they can afford to buy. Many who before had no hopes of owning Jersey cows are now looking around for another public sale at which they may help themselves. But if we mistake not the day for Jersey Waterloo's is over in the West for the next decade.

True merit, such as the well-bred Jersey cow possesses, is sure to be appreciated wherever known. The country is by no means nearly supplied with dairy stock. The butter-making Jersey cow has but commenced her mission here, and although we have no expectation of seeing prices restored to what they were a year or more ago, we do expect breeders to find a good profit for many years to come in rearing Jerseys of the best milk and butter strains.

PHIL. THURTON.

The Wabash Route.

The Wabash, St. Louis & Pacific railway passes through the richest agricultural country in Iowa, Missouri, Illinois and Indiana. No other system in the country taps such a fertile region as this road with its 3,500 miles binding together the great cities of Chicago, St. Louis, Kansas City, Detroit, Toledo, Council Bluffs, Des Moines, Indianapolis and Michigan City, besides scores of smaller cities. This important system of railroads has been fostered, not by any great land grants, rather by the never-failing agricultural country, which it drains of immense farm products and countless live stock for the markets of the world.

To the traveling public who wish to travel anywhere east of the Missouri river, the Wabash Route is commended, for it deservedly bears the reputation of running the finest trains that have ever run from Kansas City and St. Louis into Chicago, with its elegant coaches, reclining-chair cars, Pullman and Woodruff palace sleeping cars, famous dining cars, and best of all, the magnificent Mann Boudoir cars, the only line running them in the West. All these things contribute towards making the Wabash Route unequalled for elegance, comfort and quick time.

This road now, with its superior accommodations in every particular, has done much to remove the dread of the long trip to eastern points. It is really a luxurious picnic, verified by the writer, to take a trip to Chicago or Boston by way of the famous Wabash Route. For full information concerning this route and a free map of Chicago, mention this paper and address H. N. Garland, Passenger Agent, 531 Main St., Kansas City, Mo.

One of the fashionable shades this season is "biscuit brown." It makes a lovely combination with old-dough gray.

Senator Harris, of Tennessee, is disgusted with the administration. It is not stated whether Harris wanted post-offices or consulships.

Gossip About Stock.

G. E. Hunton, Abilene, one of our Hereford advertisers, made a sale of forty Hereford bulls that were shipped to New Mexico last week.

Wichita, Kas., has union stock yards now, run on a capital of \$25,000. This is a venture yet in its infancy as far as capital and business are concerned. Wichita has a great future before her.

Dr. Hopkins, a Territorial Veterinarian, has caused quite a number of horses killed in various parts of Wyoming, affected with glanders. The Territorial laws of Wyoming provide for the condemning, killing and paying for glandered horses.

Holstein-Friesian is now the fashionable name of that famous dairy breed which is getting such a firm foothold in Kansas. It will be a little difficult at first to relinquish the old and terse name, Holsteins, but the style now is Holstein-Friesian.

The Kansas Cowboy says that S. A. Bulard & Co. have purchased 40,000 acres of land of the Santa Fe railroad company, in Finney county, for a stock range, which is being enclosed with a wire fence. They will place 4,000 head of cattle in this pasture.

An event in the history of the Short-horn business of Iowa is the forthcoming Robert Miller sale, which occurs July 29th and 30th, at West Liberty, Iowa. It is a closing-out sale of one of the very best herds in Iowa. Send for catalogue and mention this paper.

Attention is directed to the adv. of I. L. Whipple, Ottawa, Kas., in this issue. He is one of the old and enterprising breeders of Poland-China swine, and offers a lot of pigs that for breeding and quality are hard to excel. He proposes to sell them at reasonable prices.

The permanent organization of the Kansas Pacific Trotting Circuit was effected at Abilene last week. J. H. Brady, of Abilene, was elected President, and Judge Cunningham, of Salina, Secretary. We expect good things in the speed rings at the fairs this fall as a result.

The Kansas association of trotting horse breeders held a regular meeting at the Copeland hotel in this city last week, to complete arrangements for the stake races of the Association. It was decided to hold the races at the Topeka fair grounds from September 22d to 25th inclusive.

The number of sheep in the United States and Territories, according to the Department of Agriculture, is 50,360,243, valued at \$107,960,650, an average price of \$2.14. The decrease from 1884 is considerably more than a quarter of a million. Kansas has 838,143 sheep, worth an average price of \$1.93.

A picture of a group of Galloway cattle has been received at this office. It is a photographed sketch of some of the noted animals of the College Herd of Galloways, owned by F. McHardy, Emporia, Kas. The herd numbers 100 head of the best beef breed, he thinks, to be found in the West.

Mitchell county is well represented in this issue by the very interesting advertisement of J. S. & W. R. Goodwin, Jr., of Beloit, Kas. They offer some choice bargains in the way of select Aberdeen-Angus cattle and Hambletonian horses. Their show herd was one of the attractions at the last State fair.

The name of N. H. Gentry, Sedalia, Mo., is familiar to every one interested in Berkshire swine throughout the West, so well and so favorably known as a breeder and exhibitor of this famous breed. Mr. Gentry has just gotten out a new catalogue of Wood-Dale Berkshires that should be in the hands of every one interested in that breed of swine.

Breeders of Jerseys, exulting over beef raisers, can always point with pride to the Island of Jersey, containing less than forty-six square miles, or about 20,000 acres, supports over 12,000 head of cattle besides 60,000 people. Two thousand head of cattle are exported annually, and at present prices for Jerseys this dairy stronghold may be said to be as prosperous a little country as there is on earth.

On account of the great influx of settlers in the great free range country of southwestern Kansas in Comanche and adjoining counties, some 40,000 cattle, the property of members of the Comanche Pool, have been moved to Montana and the Indian Territory. It is evident that the large ranchers must

reduce their herds to the land owned or move out from before the advance of the sturdy settlers seeking cheap homes.

W. A. Gardner, Oregon, Mo., writes: I have recently sold through my advertisement in your excellent paper to Benj. Franklin, Dundee, Kas., Alderman 1234, H. H. B. He was 3 years old and weighed in very ordinary condition 1,980 lbs. I have also sold Hect 4th 3243, H. H. B., to McIntyre & Ricks, Holt county, Mo.; Hect 2d 3241, H. H. B., to James Jackson, Atchison county, Mo., and a large number of Duroc-Jersey swine to parties in Kansas, Arkansas, Texas, Dakota, Wyoming, Iowa and Missouri. My cattle and swine are both doing well and I now have a fine lot of young stock for sale.

No association in Kansas has done more for the wool-growers' industry of Kansas than the Central Kansas Wool-Growers' Association. Frequent reports of this organization have appeared in this paper. The *Journal* at Russell contains a report of their fifth annual session held there. Officers were elected as follows: President, E. O. Church; Vice Presidents—E. L. S. Bouton, Russell county; W. T. Way, Ellsworth county; M. N. Towers, Barton county; W. W. Marr, Osborne county; S. L. Bowlby, Ellis county; Secretary and Treasurer, F. J. Merrill; Corresponding Secretary, H. O. Gifford, Russell.

Swine raisers and those interested in growing hogs for market will find the present time an exceedingly favorable one for negotiating with breeders for what pure-bred swine they may need for this and subsequent seasons. Better bargains and better stock can be secured now in this lull time of summer, preceding the maturing of the corn crop. A word to the wise is sufficient. Choice breeding swine can be bought now cheaper than a few months hence when the rush sets in and prices advance and the best pigs go first. Incidentally we can truthfully say in justice to our advertisers of swine, that they are representative men and have as good stock as there is bred in the country.

On July 3d, W. P. Higinbotham, Manhattan, Kas., wrote: The Blue Valley Herd parted with the following plums to-day: Gladiator, No. 39097, Vol. 20; 10th Duchess of Gloster, Vol. 29; Moss Rose Bud 7th, Vol. 20; 4th Duchess of Blumont, Vol. 25; La Mascott, Vol. 27. The lot for \$1,500 to Mr. Chas. B. Swurm, of Council Grove, Kas., who maintains a very superior herd of high-grade Short-horn cattle on his 1,120-acre ranch in Morris county, and is the gentleman who raised, shipped and sold the three cars of steers on the Kansas City market this week that brought the highest price of the year—\$5.75 per 100 lbs.—and they were only two's this spring, averaging 1,420 lbs. when shipped. I think he will do to grow thoroughbreds.

Topeka Stock Yards Sales.

The representative sales of live stock at the Topeka stock yards for the week ending Saturday, July 4, are as follows:

Milch cows sold at an average of \$30; young calves, weighing from 150 to 300 lbs., sold at 4 to 4½ cents; several ponies sold at from \$40 to \$75; fat hogs at \$3.30; stockers, cows, sold at from \$2.40 to \$2.75; seventeen fat steers, weighing from 740 to 900 lbs., sold at a prevailing price of \$3.35; twenty fat cows, weighing from 870 to 1,250 lbs., sold at prices ranging from \$3.25 to \$3.75, an average price of about \$3.35; eighty-nine sheep of an average weight of sixty pounds sold at \$2.80.

The Kansas Farmers' Mutual Fire Insurance Company, of Abilene, Kas., is now enjoying a prosperous business and gaining a reputation that places them on a footing with the old line companies. The company has complied with the enactment of the last Legislature, which requires mutual fire insurance companies to create a guarantee capital, and as a Kansas institution deserve equal chances at least with other reliable concerns. Look up their advertisement in this paper.

The manager of a large New York publishing house says that from fifteen to twenty publishers are anxiously awaiting the news of Gen. Grant's death in order to spring biographies of the General upon the market. The printing, in some cases, has already been begun. These include prominent publishers in the principal cities in the East and West.

Mulching--Its Practice and Utility.

By Col. Henry W. Wilson, in an address before the Massachusetts Horticultural Society. Published in Massachusetts *Plowman*:

Almost all the discussions nowadays that relate to crops of any kind, before they are concluded involve more or less of a mixture of rainfall or drought. One has a vivid recollection of some dry season in early youth, and as the rains descend in June and July, causing summer floods, and spoiling the hay crop, he thinks that more rain falls now than when he was a boy. Another remembers with great distinctness an exceptional year of rains and freshets. The recollections of youth give but a poor means of comparative meteorology and the most accurate observations and records of specialists in this department are often misleading. A year of greatest rainfall may be also a year of such scarcity of moisture at the proper season as to be a year of drought; while another year of less than average rainfall may be a year of fruitfulness and abundance.

In the year 1881 fifteen inches more rain fell in Boston than in the preceding year, and still 1881 was a year of drought, because there was a deficiency of moisture during the months of April, July, August and September, while in 1880 there was a deficiency in every summer month except July, in which there was an excess of two and three-quarters inches, and in this year (1880), with a deficiency of nearly twelve inches before the average of ten years, was a year of good harvests, although the scarcity of rain in April, May and June, with excessive temperature, gave a light hay crop, while 1881, with a rainfall of 5.43 above the average for ten years, was a year of drought and failure of crops. These years are given as an illustration of the fact that the record of rainfall is no measure of the fruitfulness of the year; but we can rest sure of one thing, that while for a period of fifty years records have shown that the earth receives an average amount of moisture and heat, still, its periodical distribution is so varied that in New England we may safely count upon a continuance of the experience of the Pilgrim fathers, which has come down to us with our inheritances—a legacy of periodical and frequent drought.

The effects of drought are so baneful and discouraging to the cultivator that the men in every age have sought to counteract it. It is one of the most natural things in the world for a reflective man to think that as the mossy carpeting which covers the ground in the forest keeps it continually moist, so a similar covering in our gardens and about trees and vines would repress noxious weeds, resist the drying action of the sun and winds, and generally prove to be a very useful thing. They argue that in the realm of Nature everything seems to work about right; that checks and balances are there pretty evenly distributed, and that it is generally safer and wiser to follow natural processes. To this end almost every material that seemed suitable has been chosen first or last to cover the soil as a mulch—leaves, both the evergreen and deciduous trees, straw, haulm, hay, both from salt and fresh meadows, rushes and sedges, spent tan, sand, sawdust, chips and bristles, have all been tried with a great variety of crops, and an equally great uniformity as to the result. Colonel Wilson next went on to recount the experience of horticulturists, in a large number of instances of the application of a variety of substances for mulching, for the last thirty-five years or more. Perhaps general experience has shown one thing pretty clearly—that substances which quickly decay are not so desirable for mulching; thus straw has proved to be more satisfactory than hay or rowen; pine needles than the leaves of deciduous trees; spent tan than sawdust. There is no gainsaying the repeated experience that any or all of these materials will check evaporation, and thus contribute to the retention of moisture; but are we entirely certain of the assumed fact that this end cannot be more readily attained in some other way, or that moisture is either the great or the sole requisite to successful cultivation?

It is as certain that with most cultivation warmth is as necessary to success as moisture. Any covering of the earth, although it may, by its non-conducting qualities, prevent evaporation, will, nevertheless surely prevent the absorption of heat by the soil, although it may obstruct the radiation of heat previously acquired. The warmth which stimulates vegetation in these latitudes comes from without, and must be absorbed. It is also inevitable that the covering which screens the surface of the earth from the action of the sun and air deprives it of the most active and useful agencies in elaborating food for plants, and thus promoting fertility. Few people realize what a wonderful laboratory exists in the soil; how curious, how delicate and intricate are its processes, so mysterious that the skill of the chemist is yet as unable to detect or explain the unknown as it is to rival or reproduce that which is known.

So far as these have been ascertained, it is well understood that, even though the chemical elements of fertility are supplied in sufficient quantity, still the stimulating action of heat, light and air is the leading essential of success. Moisture is a contributory element after the fact, and can be either supplied or reserved in various ways. To supply is the work of irrigation; to reserve is the work of cultivation. It is easy to see, with but little experience, how a mulch of any suitable substance that simply retains moisture will counteract or

diminish the beneficial effects of heat, light and air. The highest excellence in cultivation must be attained by securing the lesser benefit, without surrendering the greater requisites.

Mulching may serve to keep the surface moist, but it will be found that the portion in contact with the ground is apt to mildew and encourage fungous growth, which neither indicates nor promotes healthful vegetation. We are cautioned, therefore, against the use of easily decaying or fermenting substances. A careful examination of the under surface of most mulchings will develop the fact that it is a snug harbor for slugs, snails, worms, and all minor sorts of vermin.

If the material used cannot be usefully or properly dug into the soil after its use as a mulch has ceased, as with tan, sand or sawdust upon light soils, then the labor of spreading and afterwards gathering it together again is by no means inconsiderable. A coating two inches thick on an acre amounts to about three hundred single loads of stuff, which must cost at least \$50 or \$60 to the spread and remove. How many times could you go over an acre with a cultivator for fifty dollars! Certainly more than thirty.

It has always been observed and mentioned by experimenters that the use of mulching induces a profuse growth of fibrous roots to push up to the surface in their search for moisture and nourishment; more particularly and decidedly when the mulch contained nitrogenous matter or other element which stimulated the growth of the plant. It is not a little remarkable that none of those who have recorded this fact so repeatedly have noted that this is not a useful result. As a permanent condition of a plant, to enable it to resist all the vicissitudes of our climate, the surface is no place for its feeding roots, and although the ill effects may not be apparent in those crops which are annual, such as the strawberry, yet with all plants of a permanent character, like fruits or vines, the pushing of these fibres to the surface should be discouraged. Vegetation should be encouraged by all means to go downwards for its moisture, wherever it may ramble for its nutriment.

The roots of the strawberry and clover have been traced five feet below the surface, and grape roots have been found at the depth of eleven feet. They will always descend in search of moisture to the depth at which the ground waters stand in the soil during the season of greatest activity and growth; wherever the air can penetrate, depend upon it that a root will find it out and follow.

How can the temporary advantage of mulching be otherwise attained permanently? A little thoughtful examination will indicate the answer. Careful investigation of the condition and mechanical effect of heat and soil upon moisture will develop the fact that, except when the rains are replenishing the earth, moisture is continually ascending in the soil by the process of capillary attractions, and is absorbed at the surface by the air with which it comes in contact. In a well cultivated field not more than from one-eighth to one-tenth of the rains that falls upon the soil finally passes off by percolation; the remainder is drawn to the surface and evaporated by the process described. Anything that breaks up the uniform continuity of the texture of the soil, by which atom after atom of water is brought to the surface, will accomplish the first step in retaining the natural moisture of the soil within it.

Now, mulching, does not do this all; it only checks or moderates the approach of the atmosphere to the moistened surface of the soil, and therefore retards evaporation to that extent; but the reason why there is always so much moisture beneath the mulch is because the capillary action of the soil keeps on pumping up the water faster than it can evaporate.

The natural tendency of earthy matter to thus raise water is not generally appreciated, but can be readily seen when so dry and porous a material as coal ashes are deposited upon a slightly damp surface. Although the heap be quite large yet in a short time I have observed the dampness to have penetrated through the entire mass from below.

Anything that is a good conductor of heat and is of loose texture, applied to the surface of the ground retards the movement of the air and prevents absorption. Spent tan bark meets this requirement better than any other material that can be applied to the land. It is light and porous, and therefore retains a cushion of confined air, which is one of the best non-conductors in Nature. The gentle showers which simply moisten the earth pass through it readily, as do the heavier rains, which are absorbed by it and largely retained.

Dry soil is an excellent non-conductor, made doubly so by being loosened and pulverized and thus intermingled with air. This is precisely the condition of the soil after a thorough cultivation. When thus rendered fine and light the surface becomes truly a cushion of air and dry earth, the continuity of the insensible process of convection of the water of the soil is broken, the point at which the upward passage of the water of the soil ceases is removed to the depth of the cultivation, the free access of the air to the continually moist surface is hindered and you have accomplished all of the beneficial effects of mulching in a cheaper, more intelligent and scientific manner.

In concluding the essayist admitted that there are times when mulching around newly planted trees, or with some small fruits may be satisfactory, but he believed that generally, mulching is an indifferent substitute for tilling the soil, and that an

industrious man with the rake or cultivator will obtain vastly more satisfactory results by their diligent use.

Kansas Fairs.

The following counties have reported dates for holding their annual fairs, giving name of Secretary and the place of holding the fair:

The Western National Fair (Bismarck), Lawrence, September 7-12; Secretary, R. W. Cunningham.
Anderson County Fair Association, Garnett, August 25-28; Secretary, M. L. White.
Bourbon County Fair Association, Fort Scott, October 6-9; Secretary, E. W. Hulbert.
Brown County Exposition Association, Hiawatha, September 8-11; Secretary, C. H. Lawrence.
Butler County Exposition Association, El Dorado, September 29 to October 2; Secretary, H. W. Beck.
Chase County Agricultural Society, Cottonwood Falls, September 22-25; Secretary, E. A. Kinne.
Cherokee County Agricultural and Stock Association, Columbus, September 8-11; Secretary, S. O. McDowell.
Clay County Agricultural Society, Clay Center, September 15-18; Secretary, Wirt W. Walton.
Coffey County Fair Association, Burlington, September 15-18; Secretary, J. E. Woodford.
Cowley County Fair and Driving Park Association, Winfield, September 21-25; Secretary, D. L. Krstinger.
Dickinson County Agricultural and Industrial Association, Abilene, September 23-26; Secretary, H. H. Floyd.
Doniphan County Agricultural, Horticultural and Mechanical Association, Troy, September 15-18; Secretary, Thos. Henshall.
Elk County Agricultural Society, Howard, September 15-18; Secretary, J. V. Bear.
Western Kansas Agricultural Fair Association, Hays City, September 22-25; Secretary, P. W. Smith.
Franklin County Agricultural Society, Ottawa, September 23 to October 2; Secretary, John B. Shaffer.
Harper County Agricultural and Mechanical Association, Anthony, September 1-5; Secretary, J. W. Clendenen.
Harvey County Agricultural Society, Newton, September 22-25; Secretary, A. B. Lemon.
Jefferson County Agricultural and Mechanical Association, Oskaloosa, September 30 to October 2; Secretary, A. J. Buck.
Valley Falls District Fair Association, Valley Falls, September 1-4; Secretary, M. M. Maxwell.
Jewell County Agricultural and Industrial Association, Mankato, September 29 to October 2; Secretary, Geo. A. Bishop.
Johnson County Co-operative Fair Association, September 28-30; Secretary, C. M. T. Hulet.
LaCygne District Fair Association, LaCygne, September 29 to October 2; Secretary, O. D. Harmon.
Marion County Agricultural Society, Peabody, September 8-11; Secretary, L. A. Buck.
Marshall County Fair Association, Marysville, September 22-25; Secretary, C. B. Wilson.
McPherson County Fair Association, McPherson, September 29 to October 2; Secretary, J. B. Darrah.
Miami County Agricultural and Mechanical Association, Paola, October 7-10; Secretary, H. M. McLachlin.
Montgomery County Agricultural Society, Independence, September 16-19; Secretary, B. F. Devore.
Morris County Exposition Company, Council Grove, September 29 to October 2; Secretary, F. A. Moriarty.
Nemeh a Fair Association, Seneca, September 15-18; Secretary, W. E. Wilkinson.
Phillips County Agricultural and Mechanical Association, Phillipsburg, September 16-18; Secretary, J. W. Lowe.
Rice County Agricultural Society, Lyons, October 13-16; Secretary, C. W. Rawlins.
The Blue and Kansas Valley Agricultural Society, Manhattan, August 25-28; Secretary, S. H. Sawyer.
Saline County Agricultural, Horticultural and Mechanical Association, September 29 to October 2; Secretary, C. S. Martin.
Arkansas Valley Agricultural Society, Wichita, October 5-9; Secretary, D. A. Mitchell.
Sumner County Agricultural and Mechanical Association, Wellington, September 8-11; Secretary, D. A. Espy.
Neosho Valley District Fair Association, Neosho Falls, September 21-26; Secretary, O. S. Woodard.
Decatur County Exposition Society, Oberlin, September 23-25; Secretary, T. D. Bebb, Vallonia.
Smith County Agricultural Society, Smith Center, September 23-25; Secretary, F. J. Pattee.
The Kansas City Fat Stock Show, Riverview Park, Kansas City, October 29 to November 5; Secretary, Edward Haren.

Read This.

We have a Nichols, Shepard & Co. 10-horse power Traction Engine, a Nichols, Shepard & Co. 36-inch cylinder Separator, a Keystone 6-hole Power Sheller, with water-tank on trucks, belting, jack, and everything to make a complete Steam Threshing and Corn-Shell-ing Outfit. Engine and machines are practically new and in good working order. We will sell them at low prices for cash or on time payments, or trade them for good country or town property. For further particulars come and see us or address

IRON CLAD STORE CO.,
Wamego, Kansas.

A peacock died at Stapleton, Staten Island, a few days ago, which had become famous throughout the Island from his trick of taking a drink at the bar whenever any one would pay 25 cents to see him hop on the counter and toss off a glass of ginger ale with a knowing bow to the party.

The Peach Crop.

The department of Agriculture, on the 4th inst., issued the following in relation to the coming crop of peaches: The past winter has fully demonstrated the unfitness of the more northern latitudes for peach-growing. From the upper Ohio valley and the lake States there comes but one report. It tells of trees all dead, whole orchards, even in the most sheltered situation having succumbed to the severe freezing. In New England there was much winter killing, and the few surviving trees that bloomed were stripped of their blossoms by the late frosts of spring. New York and Pennsylvania showed a like experience, in Maryland, Delaware and New Jersey the peaches of commerce are grown. The bloom was good and indications point to a crop slightly above the average. There was no injury from the frost, and as yet none from insects or disease. The cold, backward spring, with late frosts, has injured the otherwise favorable prospects in Virginia and North Carolina. "Georgia and the Gulf States report the condition unusually high. In the former State many correspondents claim that the outlook is for the largest crop ever grown. Tennessee and Kentucky likewise report very favorable conditions, while in the West and Northwest the almost universal expression is 'no blossoms' and 'trees dead.'"

Milk and Butter Test.

An official test was made of the milking qualities of Duchess of Smithfield, 4256, an Ayreshire cow, the property of H. R. C. Watson, West Farms, New York. The cow was entered for the special milk prize of 1885, in the Ayreshire Breeders' Association at Brandon, Vt. The record of three milkings daily one week is given. The total was 463½ pounds of milk, which would be a daily average of 66½ pounds, something over eight gallons. During the day the cow was in a clover and timothy pasture, and at night had all the cut grass she would eat. She also had wheat bran, corn meal, oil meal and ground oats amounting to about 18 quarts daily.

The same 463½ pounds of milk made 19 lbs. 6 ounces of butter, so that her milk record and butter record for one and the same week is, milk 463½ pounds; butter 19 lbs. 6 ounces.

Duchess of Smithfield, in one year, on moderate feed and without forcing, gave 9,216 pounds of milk, which, at the rate of test, would make about 385 pounds of butter, a little more than an average of one pound a day for the entire year.

The cow is a deep, rich, red, and weighs 1,128 pounds.

Late Patents on Farm Machinery.

List of patents granted for agricultural machines, implements, etc., for the week ending Tuesday, June 30, 1885, compiled from the official records of the United States Patent office, expressly for the KANSAS FARMER, by Herring & Redmond, solicitors of patents, No. 637 F street N. W., Washington, D. C., of whom information may be had:

No. 321,002.—Jacob Blodel, Wyandotte, hame.

No. 321,292.—Thomas Hatfill, assignor of one-fourth to F. E. Tracey, Mount Hope, windmill.

No. 321,367.—D. N. Jones, Winfield, wagon-box coupling.

No. 321,156.—G. W. Sypler, Seneca, rotary steam valve.

TRADE MARKS.

No. 12,365.—Oliver & Imboden Co., Wichita, wheat flour.

No. 12,366.—Oliver & Imboden Co., Wichita, wheat flour.

An elephant became unmanageable at a circus performance in Lapeer, Mich., last week, and soon put an end to the affair. He did not injure people, but he tore up seats and made havoc generally.

The Clay Center *Dispatch* urges farmers to save their oats straw.

The Home Circle.

The Bridal Veil.

We're married, they say, and you think you have won me—
Well, take this white veil from my head and look on me;
Here's matter to vex you and matter to grieve you,
Here's doubt to distrust you and faith to believe you—
I am all, as you see, common earth, common dew;
Be wary and mold to me roses, not rue!
Ah! shake out the filmy thing, fold after fold,
And see if you have me to keep and to hold—
Look close on my heart—see worst of its sinning—
It is not yours to-day for the yesterday's winning—
The past is not mine—I am too proud to borrow—
You must grow to new heights if I love you to-morrow.

We're married! I'm plighted to hold up your praises,
As the turf at your feet does its handful of daisies;
That way lies my honor—my pathway of pride,
But, mark you, if greener grass grow either side,
I shall know it, and keeping the body with you,
Shall walk in my spirit with feet on the dew!

We're married! Oh, pray that our love do not fail!
I have wings fastened down and hidden under my veil!
They are subtle as light—you can never undo them,
And swift in their flight—you can never pursue them,
And spite of all clasping and spite of all bands,
I can slip like a shadow, a dream, from your hands.

Nay, call me not cruel, and fear not to take me,
I am yours for a lifetime to be what you make me,
To wear my white veil for a sign or a cover,
As you shall be proven my lord or my lover;
A cover for peace that is dead, or a token
Of bliss that can never be written or spoken.

—Alice Carey.

Fruit-Eaters Need No Doctor.

We were struck recently by the remarks of a doctor friend of ours, who said no one thing will do so much to make people independent of the medical profession as the daily free use of fruit. He had noticed that those farmers in whose family fruit was regularly and largely consumed seldom needed his services. We thought what a pity that every farmer in the land could not be convinced of these truths. It is a deplorable fact that farmers' families do not enjoy that robust health that country air and outdoor life, with plenty of exercise, should give. It is also a fact that living on farms whose rich acres are achieving to produce abundant crops of the varied fruits, but very few have plenty, and many never have any fruit, except it may be an occasional apple. The standard food in a majority of farmers' houses consists largely of bread, butter and meat (mostly pork) fried in grease, and where pastry is used, it has lard in large proportion in its composition; and this food is eaten at least twice, and in many families, three times a day, year in and year out. Is it any wonder that they are not more healthy, and that their prevailing diseases are such as indicate an over-consumption of greasy food? If fruits were expensive or difficult to raise, there would be some excuse; but there is no part of the country without plenty of varieties adapted to its soil and climate, and just such as are fitted by nature to both nourish and cleanse the body, and no more skill is required to grow them than to grow corn or wheat.

Why is it that so few farmers make any attempt to provide an adequate supply of what would add much to their pleasure, and save many times its cost in doctors' bills, to say nothing of the sufferings and loss of their dear ones? We entreat you, decide just now not to let the spring pass without planting a fruit yard. Surely it is better to grow fruit than to be continually dosing with medicine!—*Rural New Yorker.*

Chickens prepared in this way are a change from the usual fricassee: Cut up two young chickens, cook them for half an hour in a saucepan with a little bacon cut in dice, adding thyme, two bay leaves, a small onion, parsley and a piece of butter, moistening with white wine. Mix the yolk of three eggs in half a cup of cream and pour the mixture over the chickens, taking the saucepan instantly off the fire. Arrange the pieces of chickens symmetrically on a dish and serve.

To clean and freshen old matting rub it with a cloth wet in salt water, being careful not to allow any drops of water to dry in the matting, as they will leave spots difficult to remove. Heavy, varnished furniture should never rest directly upon the matting, for even good varnish, becoming soft in warm weather, will stain the straw. Matting may be turned if the loose ends of the cords are threaded in a large needle and drawn through to the other side.

The Young Housekeeper.

The young wife, on first starting house-keeping, gets overwhelmed with advice. "She must be very strict with her servants; she must be mild with them; she must be neither the one nor the other; must be both together," she is told. Economy is another matter on which some advisers are eloquent.

I myself began housekeeping with an impression, derived from my numerous female relatives, that a leg of mutton was the only economical joint in the world. My ideas on legs of mutton got mixed. I very nearly ended in having two a day, one hot and the other cold, so as to be doubly economical.

Treat your servants as human beings, and not as machines. Be regular and punctual yourself, and above all study your husband's wishes and comfort. This is quite sufficient advice for a young lady to start with on her journey through life, if remembered and acted upon. No fear of shipwreck or mutiny among the crew then. She may occasionally bump the ship against a rock or run aground, but it will get safe off in time, and into smooth waters at last.

I should advise every young housekeeper to keep strict accounts from the very first. Learn how much you have to spend on your house, on your dress, on your amusements, and then keep each account separately. It will be a real help in time, though it is tiresome to do at first. It is better with small means to pay your bills weekly. It is not only a check upon your tradesmen—you are not likely to forget in a week what you have ordered, though in a month you very probably will—but you also learn in this way how much things really cost, and what quantity is required for a house. It is no use asking a friend how much your bills ought to be. Find out for yourself how you can have plenty without extravagance, and be generous without being wasteful. The quantity used will depend on the number your family consists of. In some houses the baker's bill is the largest in proportion, in others the butcher's, and so on. There can be no law about these things.

Above all, do not begin by spending up to your full allowance; always leave a margin. Necessaries have a wonderful knack of going up, but they do not come down again so easily.

Another advantage in keeping accounts is that it shows you how trifles run away with money. It is often said: "What is the good of accounts? The money is gone and there is an end of it." But it need not be the end. The accounts help to give us the moral. We can learn from the moral the lesson where to be more careful.

One is very apt to see a thing in a shop that seems to be wonderfully cheap, and may be very useful some day, and, therefore, to buy it. "Women's bargains" are passing into a proverb. A good thing to remember is that a thing is not really cheap for you if it is not desired.

In housekeeping, have everything of the best—good meat, good bread, good coals. A word about the last. Don't attempt cheap coals; they are a snare and a delusion—all dust and ashes. If you want to make your coal last well, invest in a cindersifter. They are to be had at every iron-monger's. Have all the ashes sifted through it before throwing them into the dust-hole. The small, worthless stuff goes through and the cinders remain and can be used again. They make a hot, clear fire, but, of course, do not burn for so long a time as coal. If your coal is bad, it burns quickly to small slate ash, and is not only wasteful but dirty, for the small, white dust flies about and settles on everything in the room.

For a man or woman who has daily work to do—and we must remember that brain work takes more out of a person than mere manual labor—good fresh meat is absolutely necessary, as it also is for children while growing.

It is not a good plan to send orders to your butcher by the boy who "calls for orders." Your ideas and the butcher's are not always the same as to the size and choice of joints. If you have a good, trustworthy cook, she can go for you, but I should advise a young housekeeper to go and choose what she wants herself, certainly for the first year it gives experience.

When you order dinner think carefully about all that will be wanted. Dinner is a serious subject in some houses. If you are apt to forget little things—and most young housekeepers are at first—take a pencil and paper and write down everything that is wanted. Give out what you have in the house, for of course you will have a store cupboard. Storerooms are a luxury not often found in small town houses. Order all that will be required in the morning, then it will be off your mind; if left until later some one or something will interrupt you, and the small orders will probably be forgotten.

When we sit down to dinner those little forgotten things return with accusing force. Sometimes there follows a grumble; sometimes a kindly "Never mind this time."

The last makes most impression. No wife likes to remember a grumble, but no true wife can forget the kindly word.

Many a young wife have I heard say, "He was so kind about it. I will try and remember better in the future."

If any young husband deigns to read these few hints, he is to try to remember that the kindly word of encouragement helps the young housekeeper to persevere and to succeed in remembering and doing all the little things that tend to make home happy.—*The Lady.*

If dry or sour bread is cut in small pieces and put into a pan and set in a moderately warm oven till of a light brown and hard and

dry in the center, it can be kept for weeks. Whenever you wish to use a portion of them for puddings or griddle cakes, soak them soft in cold water or milk. If the bread is sour use saleratus or soda. With proper care there need be no waste of even poor bread.

Good Coffee Easily Made.

It is one of the simplest things in the world to make a good cup of coffee, and this can easily be accomplished by applying a little common sense. If you put boiling water on coffee and do not let it boil, you have all the good qualities preserved. One reason dyspeptics cannot drink coffee is because it is boiled. The style of coffee-pot is just a matter of fancy. I have made as good coffee from an old tomato can as I have ever sipped from a cup filled from the finest French coffee urn. We should take lessons in this matter from the Turks and Arabians, who grind their coffee to a fine powder. When the coffee is ground as fine as possible put it in a little bag of unbleached muslin, which should be tied tightly enough to prevent the escape of the grounds. If you use a cup of unground coffee you can make over a quart of very strong, black coffee. In making coffee many people sacrifice flavor for strength. Bitterness comes from boiling. When boiling water is placed on the bag of ground coffee it should stand at least three minutes before serving. Remember the longer it stands the stronger it becomes.—*Lecture by Miss Corson.*

Moths.

It is time to look out for these pests, and we print these excellent hints from an exchange: "The destruction of moths is one of the greatest vexations which careful housekeepers have to contend with, and their depredations are not to be remedied after they have once made inroads. Houses heated by furnaces are especially predisposed to have moths, but every housekeeper must be on the watch for them, for from the time that the windows begin to be left open the trouble begins. Heavy carpets sometimes do not require taking up every year, unless in constant use. Take out the tacks from these, fold the carpets back, wash the floor in strong suds with a tablespoonful of borax dissolved in them. Dash with insect powder or lay with tobacco leaves along the edge, and tack. All moths can be kept away and eggs destroyed by this means. Ingrain or other carpets, after shaking, are brightened by sprinkling a pound of salt over the surface and sweeping carefully and thoroughly. It is also an excellent plan to wipe off the carpet with borax water, using a thick, flannel cloth wrung tightly, taking care not to wet it, but only to dampen. Open the windows and dry the carpet before replacing the furniture. Other woollens, including blankets and wearing apparel, must be beaten and brushed and folded smoothly. Be careful to clean every spot with ammonia and water, not too strong, and a dark woolen cloth. Tie pieces of camphor into little bundles, and put one in each article. Wrap the article in a newspaper, as printer's ink is a great preventive of moths, and sew them up in strong sheeting bags, labeled, so that it will not be necessary to open them during the summer except for use. This is a good way for those who do not possess cedar boxes, and the articles need have no other care if every spot is treated as directed and the garments are not left hanging in the closet too long before putting away for the season."

The Castile Soap Delusion.

By some unaccountable means there has been handed from generation to generation two erroneous ideas concerning castile soap. One error is that the materials of which it is composed are invariably of the best, and the other is that it is beneficial to the skin, and consequently desirable for the toilet. These errors have so taken hold of the popular mind that it is usual to provide a piece of "white castile soap" to wash the new-born infant, and this is usually done by the advice or sanction of the family physician, who having imbibed the prejudice from his preceptor, takes to recommending it as a matter of course, without using his own judgment.

It is now, however, becoming a doubt among many physicians and nurses as to whether this favorable opinion about castile soap is not entirely at variance with the true facts of the case, and it is a settled opinion with some that castile soap is really responsible for many of the skin diseases that are prevalent even among persons whose occupation should cause them to be free from any such unwelcome and annoying complaints; ministers and lawyers, bankers and artists, and men and women whose occupations (or want of occupation) would seem to preclude almost any possibility of such ungenteel disease as salt-rheum, tetter, etc., still, in spite of their exemption from exposure, are as likely as any, not only to have these or worse skin troubles, but to suffer with them for years. Infants, even the children of the wealthy, surrounded by all that wealth can provide, are seen affected with eruptions and sores, or rendered hideous by ugly scabs that seemingly cannot be either accounted for or relieved.

We advise the blame to be put in such cases where it usually properly belongs—to their favorite soap, for in ninety-nine cases out of a hundred skin diseases will be found to arise solely from soap, and no matter how highly any particular kind of soap is recommended, any person with a skin trouble should at once make a change.

It is really very doubtful if any vegetable

oil is adapted for a soap intended for the skin, even if the oil is fresh and sweet, but there is very little doubt that even the best brands of white castile soap are made from rancid olive oil; that being of too poor quality for table use, is in consequence used for making soap. The best imported castile soap costs the importers only from ten to twelve cents a pound; all over that paid by the public being profit to the importer and retailer; and pure, sweet olive oil brings too much to enable it to be made into castile soap and sold at any such price. We trust this article will induce physicians to give this subject the consideration that it deserves, and we feel confident that the result will amply repay them for their trouble.—*Farm and Fireside.*

To Remove a Mote From the Eye.

Take a horse-hair and double it, leaving a loop. If the mote can be seen lay the loop over it, close the eye, and the mote will come out as the hair is withdrawn. If the irritating object cannot be seen raise the lid of the eye as high as possible and place the loop as far as you can; close the eye and roll the ball around a few times, draw out the hair; the substance which caused so much pain will be sure to come with it. This method is practiced by ax-maxes and other workers in steel.

Oh, hearts that break and give no sign
Save whitening lip and fading tresses,
Till death pours out his cordial wine,
Slow-dropped from misery's crushing presses.

If singing breath or echoing chord
To every hidden pang were given,
What endless melodies were poured,
As sad as earth, as sweet as Heaven.

—Oliver W. Holmes.

Speak kindly, oh, speak soothingly
To him whose hopes are crossed.
Whose blessed trust in human love
Was early, early lost,
For wearily, how wearily
Drags life if love depart—
Oh, let the balm of gentle words
Fall on the smitten heart!
Go gladly with true sympathy,
Where Want's pale victims pine,
And bid life's sweetest smiles again
Along their pathway shine;
Oh, heavily doth poverty
Man's nobler instincts bind!
Yet sever not that chain to cast
A sadder on the mind.

Through shade and shine the journey lies
Beneath the ever-changing skies;
Our finite skill can ne'er divine
If one day shall be dark or fine;
God hides it from our anxious eyes.
How well for him who daily tries
By faith to pierce the cloud's disguise,
And sees the Father's glad design
Through shade and shine!

Oh Thou, who art the Only Wise,
In mazes dark my way advise;
Let bitter days with sweet combine,
To make my life more truly Thine;
Thus led by Thee, my song shall rise,
Through shade and shine.

—S. S. McCurry, in Quiver.

Dr. Crudelli, of Rome, gives the following directions for preparing a remedy for malaria which may be worth trying, as it is said to have proved efficacious when quinine has given no relief: Cut up a lemon, peel and pulp, in thin slices, and boil it in a pint and a half of water until it is reduced to half a pint. Strain through a linen cloth, squeezing the remains of the boiled lemon, and set it aside until cold. The entire liquid is taken fasting.

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The Young Folks.

The Old Home.

"Return, return," the voices cried,
"To your old valley, far away;
For softly on the river tide
The tender lights and shadows play;
And all the hills are gay with flowers,
And all the hills are sweet with thyme;
Ye cannot find such a bloom as ours
In yon bright foreign clime!"

For me, I thought the olives grow,
The sun lies warm upon the vines;
And yet I will arise and go
To that dear valley dim with pines!
Old loves are dwelling there, I said,
Untouched by years of change and pain;
Old faiths that I had counted dead,
Shall rise, and live again.

And still "Return, return," they sung,
"With us abides eternal calm,
In these old fields where you were young,
We cull the heart's ease and the balm;
For us the flocks and herds increase,
And children play around our feet;
At eve the sun goes down in peace—
Return, for rest is sweet."

Then I arose, and crossed the sea,
And sought that home of younger days;
No love of old was left to me
(For love has wings, and seldom stays);
But there were graves upon the hill,
And sunbeams shining on the sod,
And low winds breathing, "Peace be still;
Lost things are found in God."
—Sarah Doudney.

How Window Glass is Made.

The workmen were engaged in making window glass, and proceeded in a way that seemed very simple. A young man would take one of the long hollow iron pipes we saw the gaunt man juggling with, and approaching one of the mouths of the great furnace with the indifference of a salamander—first, however, protecting his face with a leather screen—would proceed by a series of wave-like movements of the pipe to gather at the end of a ball of liquid glass, getting his supply from a clay pot. The pots contained a mixture of soda, lime, and sand, which had been reduced by firing for two days. After gathering a wad the size of a coconut, the young man would turn and cool it upon an iron plate, still keeping up the wave-like rotary motion. Then he would return to the pot and begin fishing again, then back to the iron plate for cooling, and then more angling. By the time he has gathered a ball of about sixteen pounds weight and of intense heat. Now cooling the pipe with water, he carries his burden over and deposits it on a larger iron plate—this one floating in a tub of water—gives the pipe to a glass blower, and seizing another iron, goes back to the furnace to perform his part once more.

The glass blower rolls the ball upon the plate until he has made the glass assume a pear shape, when he applies the pipe to his lips and blows till his cheeks stand out like red apples, blows till he is red behind the ears, blows until he becomes of a complexion as blooming as the glass. All this while he imparts a rotary motion to the pipe, and does not cease either the blowing or the rotating until the pear shaped glass has expanded into the rude semblance to a bottle with no neck and a very thick bottom. Now over he goes to one of the mouths of the side furnace, into which he thrusts the pipe to warm the mean looking bottle at the end. At his feet is the grave-like pit.

Now watch him. He takes the pipe from the furnace, blows it, and lets it swing before in the pit. The glass begins to lengthen out, stove pipe fashion; into the furnace again; now out, and up over his head. Agitate the pipe. Blow. Now a big sweep from mid-air through the pit and up again. Blow. Now a pendulum-like movement—up—down—way cross—back! The glass is become a cylinder four feet long. Heat again and withdraw. Blow. Rotate. A little more jugglery—here—there—right side—left—a beautiful swing below! The cylinder is over five feet long now! The work is done.

These cylinders are placed still glowing on a stand. A tap with a piece of steel releases the blow pipe, the blower makes a measurement with a stick, wraps a string of hot glass about the cylinder, the superfluous parts fall off as though cut with a diamond, and the completed cylinder—about five feet long and eighteen inches in diameter—is carried away to a place of safety. Tomorrow a hot steel rod will cut each of the cylinders through one side, thus leaving it like a sheet of paper twisted until its upper and lower edges meet. This roll will be subjected to another gentle baking, when it will flatten out into a large sheet of glass. This will be cut into sheets of the proper size, and the work is done.—M. Quad, in Detroit Free Press.

Frances E. Townsley was ordained by a council of Baptist churches in Nebraska. This is the first instance, in modern times at least, of the formal setting apart of a woman to the office and work of the evangelical ministry. The Methodist church, though it permits women to speak in its pulpits, has declined to ordain them. There have been a few women preachers like Miss Anna Oliver, and "Bible readers" like Miss Smiley, but none of them has obtained ordination. The Nebraska case is distinctly a new thing.

Jersey's Subterranean Forests.

"If you want to see something curious," said a friend who was a member of a government survey, "go down with me to Woodbine." Four miles beyond Woodbine, out on the sandy stretch of old sea bottom or beach that is termed the Cape May Peninsula, we came upon Dennisville, where all the Dennises of all time had evidently settled.

"We're all in the loggin' business," said a tall, thin Dennis, yet as far as the eye could reach not a tree could be seen standing that would make even the ghost of a fair log. "They ain't a growin'," continued the man. "They're underground. We dig for them, or spear them, as you might say. Here's the tool," and stepping into a low hut he brought out a crowbar, that, like everything else, seemed attenuated, and was stretched out into a long, slender-pointed rod. "We wade along," continued the man, "and probe with this feeler, and when we strike a log we feel around, and if it's a good one we dig her up, and if it ain't we let her soak; that's about the way of it."

"So down in Jersey you burrow for your logs?"

"That's about it," replied the man. "You know we're obliged to be a whit odd or so; we've got the name of it, onnyhow."

"The secret of this business," said my friend, the geologist, "is that ages ago all this area was covered with a fine growth of large trees, and the same are found growing in some parts of the swamp yet, but they have died out and fallen down and sunk into the soft mud, and so been covered up by mould and mud, until many other layers have grown over them; but in some remarkable way the wood is preserved, and these sunken, ancient logs are just as good for shingles and other articles as they were when alive; hence, for many years there has been a steady hunt for them, and Dennisville is a result of the industry. To the botanist, the tree is the evergreen white cypress, or *cypripedium thuyoides sempervirens*, and the numbers that once grew over this swamp and that have been entombed are beyond conception. The trees upon or near the surface are the only ones available, and fortunately are the best, but far below there are probably myriads of others turned to stone, and representing the past geological ages of the earth. The logs were worked out by the men who are nicknamed 'Swampdiggers,' and who live in the midst of the malarious district all their lives. When a log is found, a ditch is made about it, into which the water soon flows. A great saw is then applied and the roots removed, and as a rule, the log will rise to the surface, and can be cut up and carried off, though in many localities the shingles are made right on the spot and dragged over the swamp on roads in many cases made of boughs and twigs. This curious business is not confined to New Jersey, but over in Delaware and Maryland there are similar swamps, where the shingle business has been carried on for years. One of the swamps in Delaware extends over twenty-five square miles, and hardly a house in Sussex county but what is shingled from the ancient deposit."

"I tell ye," said an old farmer from this region, "that we're a livin' on a curious kind of crust round here. In p'int of fact, my farm might be said to be perched on a reg'lar woodpile; there ain't no end of it. I built a foundation to a barn some years ago down in Delaware on the swamp lot, and the further down I dug the more logs I came onto, and I reckon way down its clean, solid wood, and when a fire breaks out in the swamp you want to keep your eyes peeled, now I'm a talkin'. How so? When I married my old woman I bought a patch right on the edge of the swamp, and the land ran right into it about half a mile. That summer it was monstrous dry, and after a while the fires began to break out, and afore we knew it it had crept up to within a thousand feet of the house. But we got at it with brush, and, as we thought, put it out, and did; but that night I was awoke by hearin' a crash so loud that you'd a' thought the hull house had come down, and when I got out there was a blazing fire right over by my fodder house. I got there in about two minutes, and I tell ye I was scared. There wasn't hide nor hair of the house, but a deep, yawnin' hole about fifty foot across, and the Lord knows how deep, and burning red hot, just like a volcano. I tell ye I got my folks out of that diggin' for a while now. Fortunately it come on to rain the next day and soaked it out, and I ain't a drawin' the long bow when I tell you that that hull kentry had been tunneled by the fire. You see it had crept along under ground for nigh a thousand feet, eating away the wood, and finally, when it got under the fodder, the weight of the stuff broke the crust in, and down it went into a reg'lar pit of fire. I tell you, it was an unsartin place to live on, and I was thankful enough that it didn't get under the house. We'd never have known what hurt us; we'd just melted down quick. Yes, there's heaps of places in the swamp district that's eaten out just the same way. The fire will run along for miles, sometimes, and crop out where it's least expected. I knew of one case where a party of shinglers left their hut one morning, and when they came back it was gone and a fourth of an acre with it. If it had happened twelve hours later they'd have gone in. In the Delaware swamp you will find heaps of such places, and green hands when they go down there always think there has been a volcano, and so there has after a fashion."—Philadelphia Times.

Some six months ago the little son of Dr. W. A. Davis, of Cambden, was presented with a half-grown specimen of pond-terrapin, which has become thoroughly domesticated, and displays a remarkable sagacity for one of the lowest order of animal life. He goes around the house *ad libitum*. Sometimes he will disappear for days, and then he will be met traveling along one of the halls or lounging in the sitting-room or dining-room. When he takes a notion to go out-doors and finds the kitchen door open, he deliberately crawls out and tumbles himself down the four or five steps leading to the yard. How he gets up again is the mystery, as no one about the house will admit that they carry him up, but in a day or two he will be found up-stairs again. In going down he crawls to the edge of the step and falls over to the step below, and so proceeds to the bottom.

Interesting Facts.

The original George Harris of Mrs. Stowe's "Uncle Tom's Cabin" is lecturing in Detroit. He was born in 1817, and his mother was a slave.

A bicyclist fell from his machine in the early part of a twenty-mile race in New Haven a few days ago and broke his wrist, but didn't discover the extent of his injury until he had arrived home. He finished the race and came in first.

A recent report of the French Minister of Public Instruction shows that in January last 23,222 schools had a school savings bank, and that 488,024 schoolboys were depositors in these banks, and possessed there the sum of 11,285,046 francs.

A curious phenomenon is reported from some of the vineyards in the province of Malaga. According to Spanish papers, plants attacked by the phylloxera, and given up as practically dead, have begun to show marked symptoms of vitality, due, it is believed in the localities, to the destruction of the insects by gases or electrical conditions consequent on the earthquake.

The throne of the Empress of Russia is completely covered with plates of gold, and contains 1,500 rubies and 8,000 turquoises, besides many other rare and costly gems. The throne of the Czar, known as the diamond throne, is truly a marvel. It is generally conceded that Russia possesses more precious stones than any other nation, a majority of which were procured at the expense of blood. The jewels in the Cathedral of Moscow alone are valued at \$12,000,000.

The number of the stars visible to the naked eye is commonly greatly overestimated. Let one begin to count the stars and the false impression is soon dispelled. The whole number of the stars down to those of the fifth magnitude inclusive is hardly more than 1,500. Stars of the sixth magnitude are the tiniest specks of light, visible only in a favorable state of the atmosphere, and these included will not bring the count much above 4,000, except for persons who have extraordinary keenness of sight.

Instead of having lights streaming from the diadem of the Bartholdi figure, as was at first intended, it is now proposed to have electric lights placed, with strong reflectors, around the foot of the statue, casting a very strong light upon it, and thus giving it the appearance during the night of a shining statue. Then a great vertical beam of light will spring from the uplifted torch, whose light, it is calculated, will strike the lower stratum of clouds, when any are over it, enabling the reflection upon them to be seen far out at sea.

Among the many monuments to Washington is one which every visitor to the Cape Verde Isles will remember as one of the most colossal and marvelous freaks of natural sculpture in existence. Along the further side of San Vicente (the principal town) rises a bold ridge of dark gray volcanic rock, the crest of which forms a very good likeness of Washington, lying face upward, as if in sleep or death. The hero's large, bold features, the backward wave of the hair, the sweep of the massive shoulders and the frill of his shirt, are all produced on a gigantic scale with a fidelity worthy of the stalactic formations of the Adelsberg Grotto or the Mammoth Cave of Kentucky.

An extraordinary case of mistaken identity occurred in Paris last month. A woman saw at the morgue a body which she thought she recognized as the father of a girl working near her at a perfumery. The girl came, recognized her father, and the clothing also, and swooned. Coming to, she fetched a brother and two sisters, who all worked in Paris. They all signed the formal declaration as to identity. The body had been found at Meudon, near which their father often worked. The children started for Cretell, his home, to learn when he had been last seen. Arriving they found him outside his door, and greatly amused to learn that he had been found dead at the morgue.

We are indebted to Pompeii for our great industry of canned fruits. Years ago when the excavations were beginning a party of Americans found, in what had been the pantry of a house, many jars of preserved figs. One was opened, and they were found to be fresh and good. Investigation showed that the figs had been put into jars in a heated state, an aperture being left for the steam to escape, and then sealed with wax. The hint was taken, and soon after fruit canning was introduced here, the process being identical with that in vogue at Pompeii twenty centuries ago. There are many ladies among us who can tomatoes and peaches for domestic use, and do not realize that they are indebted for this art to the people of Pompeii.

The White House Kitchen and the Way Things are Done in it.

In the basement of the White House, on the north side, are situated the kitchen, laundry and bed-rooms of the President's household. A French cook presides in the kitchen, and all his surroundings are as neat as could be imagined. There was not a speck of dirt visible when a Post reporter went through the room one day last week, and the chef, as he delights to be called, was anxious to point out all the details of his department.

Very little trouble has been experienced under the change of administration, and the President has not manifested any disapproval of the delicate dishes prepared for him by the cook of his predecessor. Including the steward there are four servants in the employ of the President, and when there is a rush in the laundry the woman in charge has authority to employ assistants. It would be difficult to find brighter tins or cleaner china than there are on the shelves of the White House, and the floors in the basements are bleached white from constant applications of soap and sand. The kitchen is in the northwest angle of the White House, under the vestibule, and the sleeping rooms are adjacent, facing north. They are not generally occupied, for the help at the White House have the privilege of going home at night, and only on rare occasions do they use their rooms.

The steward and his assistants in waiting upon the President and his guests always wear swallow-tailed coats, black trousers and white vests, and everything must be scrupulously clean about a waiter before he is allowed to go into the private dining room. As fast as a course is ready for the table it is sent up from the kitchen on a dumb waiter, which is in a recess back of the ante-room on the right of the principal entrance to the White House. Inquiry among the oldest servants of the executive mansion revealed the fact that none of them had ever seen a rat about the house, although there are no cats or dogs on the premises. Even the kitchen and store-room are free and always have been, from the pests, although the building is half a century old. On state occasions or for a large reception the corps of assistants to the cook is increased, and men cooks are always employed. There is plenty of room at the large range for all, and there is no confusion, no matter what the demand may be. A colored man is steward of the White House at a salary of \$1800 per annum, and the cook is paid a similar amount. The other servants are paid at the rate of \$1.25 a day, and all the help are colored persons, even to the boy who dusts and sweeps the parlors.

Freaks of a Pet Chimpanzee.

I was once the owner of a highly-educated chimpanzee. He knew all the friends of the house, all our acquaintances, and distinguished them readily from strangers. Every one treating him kindly he looked upon as a personal friend. He never felt more comfortable than when he was admitted to the family circle and allowed to move freely around, and open and shut doors, while his joy was boundless when he was assigned a place at the common table, and the guests admired his natural wit and practical jokes. He expressed his satisfaction and thanks to them by drumming furiously on the table. In his numerous moments of leisure his favorite occupation consisted in investigating carefully every object in his reach. He lowered the door of the stove for the purpose of watching the fire, opened drawers, rummaged boxes and trunks and played with their contents, provided the latter did not look suspicious to him. How easily suspicion was aroused in his mind might be illustrated by the fact that, as long as he lived, he shrank with terror from every common rubber ball. Obedience to my orders and attachment to my person, and to everybody caring for him, were among his cardinal virtues, and he bored me with his persistent wishes to accompany me. He knew perfectly his time for retiring, and was happy when some one of us carried him to the bedroom like a baby. As soon as the light was put out he would jump into bed and cover himself, because he was afraid of the darkness. His favorite meal was supper with tea, which he was very fond of, provided it was largely sweetened and mixed with rum. He sipped it from the cup, and ate dipped-bread slices with a spoon, having been taught not to use the fingers in eating; he poured his wine from the bottle and drank it from the glass. A man could hardly behave himself more gentlemanlike at table than did that monkey. —Popular Science Monthly.

King Theebaw, of Burmah, is having a twenty-ton brass idol cast for a new pagoda palace which he is constructing.

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Snow fell in Tazewell county, Virginia, the 1st inst.

On the first day of this month twenty towns of Austria had fires started by lightning.

The Indian scare is subsiding. Troops are in readiness for action in the Indian Territory at any time.

We are in receipt of a copy of the last report (1884) of the State Horticultural Society, thanks to Mr. Brackett, the Secretary.

Cholera is still at work in Spain and extending its ravages every day. The report of July 1 shows in the neighborhood of a thousand new cases in a single day.

At the race between Phallas and Maxey Cobb, at Chicago, the 4th inst., the horses were greeted by many thousands of people. Phallas won every heat. Time, 2:14, 2:15½, 2:20½. Phallas is the champion trotting stallion.

The editor of this paper acknowledges with much pleasure the receipt of many courtesies and attentions from the good people of Oskaloosa and Jefferson county on the 4th inst. He never spent a Fourth more pleasantly anywhere, and he never mingled with a better-dressed or better-behaved people. Their kindness and attention will be long remembered.

Under the provisions of a recent enactment in Ohio, a good many inmates of the State prisons are applying for parole. As nearly as we understand it the law provides that in cases where a prisoner has means and ability to support himself and will furnish satisfactory guaranty for good behavior, he may be paroled on trial, subject at any time to being remanded to prison.

The first colored man ever made a bishop is the Rev. Dr. S. D. Ferguson, who was consecrated bishop of the Protestant Episcopal church, at New York city, on the 24th day of June last. He was born in Charleston, forty-years ago, and emigrated to Africa with his parents when six years old. He was educated altogether in the Mission schools of that country and ordained in 1865. He will go to Cape Palmas.

The southwest quarter of the southwest section of the southwest county in Kansas was taken by a settler a few days ago. It is said to be a fine piece of land on the headwaters of the Cimarron river. Two men made a dash for this particular quarter. The successful man's home joins Colorado on the west, the pan-handle of the Indian Territory on the south, with the pan-handle of Texas and the Territory of New Mexico only a small distance away.

Preparation for Wheat Seeding.
This has been a peculiar season and one of the results is more and harder work for the farmer. The ground is not in the same condition it was this time last year. It is harder and the hardness goes deeper down wherever the soil is clayey. That, of course, requires harder work in cultivation. Besides that, when ground is hard, it does not seem to have any vitality or productiveness in it. Even when it is pulverized, it is not so quick to respond to the farmer's touch. There is good sense, we think, in increasing the wheat area this year. No one knows just what the next year will have in store for us, but it is not common to have two bad crop years in succession, and then the quantity of wheat now on hand and what is to be harvested this year is so small comparatively, that it would seem unreasonable not to expect higher prices for wheat in 1886 than we had in 1884 or '85 or are likely to have to the end of the year. It is well then to begin early the preparatory work.

Plowing must be done in every case, we suppose. There is not a piece of ground in the State, probably, that is loose enough and clean enough to seed without special preparation. The ground must be plowed, plowed deep and all the weeds and trash put away down so as to be not only covered but be deep enough to be out of the way in after working. The weeds may be neatly drawn under the turning earth as the plow moves along by a rope or chain fastened, one end to the beam above the mouldboard—a little forward, the other to the double tree or evener just above the open furrow, and lying out far enough to drag over the turning ground in such a manner as to whip the weeds under neatly before the ground falls over. A plow that tumbles the ground about and leaves the weeds as much on top as below, is not fit for such work. The weeds need to be all buried out of sight and deep enough to be out of the way of cultivator teeth and drill hoes. The share should be kept sharp and the plow run at a regular depth. The furrows ought not to be any wider than the share. Every bit of the ground ought to be cut by the share. It is easier on the team and makes better work. If the plowing is well done, nothing more is needed for a time, unless the ground is very cloddy. In that case the clods must be broken as soon as possible, and the best time to do it is in the evening of the day on which the plowing is done. Use the best crusher you have. There is nothing better in such a case than a heavy roller, and especially if the weeds were long. The roller simply crushes the clods without moving them out of place, and it does not disturb weeds or other stuff put under by the plow, except to cover them more completely. A harrow is not good in this case because it tears up a good many clods and with them the weeds grown in them. This thwarts one of the objects in plowing, and leaves the ground dirty. And sliding crushers need to be handled carefully or a somewhat similar result will follow. A good crusher is made of a heavy plank so fastened to a tongue as to slide on the ground nearly flat and crosswise. Raise the forward edge high enough to be always a little above the ground, but not so high as that the movement will be a scraping rather than a sliding. The object is to crush clods right where they are and have the loosened earth drop into place right there, not to be moved ahead or out of place anywhere—simply crushed, ground and left in place. The operation is precisely like that of a stone boat, only the planks may be put the other way so as to be wider in the direction of work. The plowing and pulverizing ought

to be done as soon as possible if it has not been done already, and then let lie until seeding time, when it ought to be stirred lightly to loosen the surface and tear up all young weeds. But let that work be shallow. Wheat roots, as, indeed, all roots, need compact soil. Follow this with the seed drill, and if you do not use a press drill, it will be well to roll the ground after seeding. We very much prefer the use of rollers to follow the drill hoes and narrow enough to simply press down on the wheat that has fallen from the drills, leaving ridges between the rows. That is the best philosophy of wheat seeding in our opinion. But where one does not have the narrow rollers he must use the best he has, and it is always a good thing to press the earth compactly upon the seed.

The Chicago Strike.

There was a good deal of trouble in Chicago last week on account of a strike among street car drivers. It seems that the drivers had a grievance of some kind, (we do not know what), and they appointed a committee of their number to present the case to the officers of the company. The members of the committee were discharged by the company for no reason other than their acting as such committee. Whereupon the men who appointed the committee refused to work unless the discharged men were reinstated. The company refused to rescind the order of discharge and the men refused to work. The only injury thus far done was caused by the police in endeavoring to run the cars with new men. The strikers interfered to the extent of stopping several cars, but hurt nobody and did not injure or attempt to injure any property.

If we have the report correctly, we hope the strikers will succeed. What they did, they had a right to do. It was simply petitioning for a redress of grievances. They may not be entitled to the relief sought, but they were entitled to the privilege of asking for it without incurring the penalty of dismissal from the company's service. Their conduct was only exercising the right of petition, and if that privilege is to be taken from us the street cars may as well be parked.

That same company has a monopoly of the street car business. They drove the hacks, cabs and 'busses from the field, and they obtained control of all the ordinary travel. The business is enormous. They employ over a thousand men. Those men give their time; they go early and late, in all kinds of weather; they have been faithful even to minutes and seconds, receiving of wages barely enough to supply their necessities, and it is a great wrong to treat any of their suggestions or requests with contempt.

It is not a question of the regulation of price of labor between employer and employe; it is more than that, and reaches much further down toward the foundations of liberty; it cuts off the right of petition, and that will warm American blood any time. The war of the revolution was fought upon that very principle, and all of us have inherited our fathers' courage on that point. Because a man is a car-driver is no reason for cutting off his rights. He is quite as good as the car-owner, even though he controls millions. "We hold these truths to be self-evident," said the patriot sires, "that all men are created equal"—and when it comes to foundation principles, we know no distinction in this country.

The Fairs.

This week we publish a list of the fairs to be held in Kansas this season as far as we have been able to learn of

the dates. If we have made any mistakes, or if our list is incomplete, we will esteem it a favor to be informed by any person that knows. We would like to have every fair to be held in Kansas in our list. You will find the list on our fifth page.

A New Farm Paper.

The *New Rural*, a five-column quarto, has just come into the newspaper field. It is printed and published at Hutchinson, Kas., Dr. A. W. McKinney, editor. It is to be a semi-monthly, devoted to the interests of agriculture and specially to hygiene. In the publishers' salutory they say:

The *New Rural* will be a farm paper, containing hints in season, correspondence from our practical farmers, statistics and prospects of farm products, comparison of the profit of different crops and farm industries, etc. Our columns will be classified as follows: The farm, the dairy, the orchard, the henry, the garden, and the barnyard—in fact everything that pertains to the farm, and to do this we propose to furnish such matter and to get it up in such form as will make it attractive, as well as instructive and entertaining, and a welcome visitor to the fireside of every household who may receive it. * * * We would, however, call especial attention to our department of hygiene. This will be under the control of a physician who has had an experience of over one-third of a century in civil as well as military practice, and with his experience and the books and periodicals at his command he can and will tabulate information that will prove invaluable to our readers and seldom found in other papers.

The first number of the *New Rural* is on our table. It is very neatly printed, a clean, handsome paper, and full of good matter—forty columns of it. The *KANSAS FARMER* extends a sincere and friendly greeting to our new acquaintance. We wish it success and long life.

The subscription price is \$1.00 a year in advance. Address Wible Bros., publishers, Hutchinson, Kas.

Reformatory at Hutchinson.

At the last session of the Legislature, a bill was passed authorizing the location of a State Reformatory building at some place west of the sixth principal meridian, on condition that the point selected would assist by way of donating land and money. A number of towns competed for the building, and the Commissioners charged with the location visited all of them. The decision was made a few days ago in favor of Hutchinson. The reasons which weighed heaviest in the minds of the gentlemen were thus stated to a reporter by one of the Commission: "We are convinced that Hutchinson is the best place. All the propositions were fair and liberal, but the Board, after considering each one carefully, believed that it would be to the best interests of the State to have the institution at Hutchinson. Hutchinson has every advantage. A matter to which we gave special attention was good water and good drainage, and Hutchinson has these in abundance. Probably she is better fixed this way than any other point. A line drawn through the center of the State, east and west, shows that all the State institutions (except the imbecile asylum) are north of that line, or in the northern portion of the State, and we think the south part of the State should have a show; that is another reason why we located the Reformatory at Hutchinson. I assure you that it was no easy matter to come to this conclusion, but we believe that any one who would consider the matter as fairly as we have, would make the same location. It is in the midst of a populous and prosperous section of country, and a section which may be easily approached from all sections of the State. Hutchinson has proposed to give us a section of land for the institution."

Example of the Scottish Farmers.

It may not be of special value to Kansas farmers to know what their brethren across the water are doing, but we believe that it is a good thing to know what is going on in every part of the world. It does not now require thirty days to cross the ocean, nor does it require three months to go from New York to the mouth of the Missouri river. Wheat raised more than a hundred miles from a large town does not lose its value. With the application of steam to machinery came a revolution in all material interests. Then followed the telegraph, and now we know daily what is doing in every country. Farming has kept pace, nearly, with other things, and a successful farmer needs to know a good deal about his fellows.

Farmers in Scotland do not, as a rule, own the land they till. They occupy it as lease holders or renters. But the Scottish farmer is a good deal more of a man than he was a hundred years ago, just as the American farmer is. It is quite commonly believed, however, that farmers in the British Isles are nobody. This is a great mistake. Though he does not own his land, he is a voter and has a voice in public affairs through his representative in the House of Commons, and farmers there meet in public assemblies and discuss their interests in relation to politics just as we do here.

Our attention was called to the subject by seeing an editorial article in a recent issue of the *Scottish Agricultural Gazette*, headed "No Politics," in which the writer refers to the proposed action of farmers there. The subject has interest for Kansas farmers in two respects, (1) in the mere matter of information, showing the state of freedom in Scotland, and (2) showing the true spirit of men who would improve their social condition and at the same time increase their political power. Farmers in this country do not need anything as much as they do some kind of organization to the end that their power shall be felt in the politics of the nation. Specialists, as cattle breeders, wool growers, horticulturists, &c., organize themselves for mutual protection of members; but the general farmer has no organization. He lies around loose and is always at the mercy of consolidated forces. Our Scottish brethren have set us a good example in this respect. The *Gazette* says:

The cry of "No Politics" in connection with agricultural societies has been so generally accepted that there seemed great doubt whether the members of the Central and Associated Chambers of Agriculture would decide to draw up a political program. At the meeting of their council on Tuesday last it was, however, pretty unanimously decided to ask all the chairmen and officers of the "Chambers of Agriculture in Association" to take action in the coming Parliamentary contests. And not only so, but a short catechism was agreed upon in which candidates at the general election will be examined, and according to the answers given they will be considered acceptable or non-acceptable to the agricultural voters. There is no doubt that the course decided upon is a new departure. Hitherto, Chambers of Agriculture have contented themselves with an abstract discussion of a political subject or legislative proposition as occasion for it has arisen. When they have taken any action outside their places of meeting, such action has either taken the form of a deputation to some department of the government, or the transmission of resolutions to members of Parliament asking them to support or oppose bills already under the consideration of Parliament. In other words, whereas, formerly, Chambers of Agriculture have endeavored to bring their influence to bear only on members of Parliament *in esse*, they will, in the future, endeavor to influence also members of Parliament *in posse*. In favor of this decision it may be said that a man seeking his

seat is more amenable to pressure than a man who has already secured his seat. It may also be affirmed that, if members in sufficient numbers can be sent to the House of Commons pledged to a certain course of action on certain definite subjects, those subjects will of necessity be dealt with by Parliament. One speaker at the Central Chamber objected that when it came to voting in the House, each member would vote with his colour and according to the dictates of the whip of his party. But the business committee, by whom the draft resolutions were submitted to the general meeting, put down, as three questions upon which Parliamentary candidates would be expected to give satisfactory answers—cattle diseases, local taxation, and railway rates; and none of these can fairly be called party questions. There is one convincing argument in favor of farmers, as a body, taking up more actively than they have hitherto done, certain definite lines in politics. It is not very pleasant to confess, but it may as well be granted, that the cultivation of the land of England is of less consequence to the English people than it used to be. We are in the habit of telling ourselves that the amount of capital invested in land, and the number of people employed on it are of such overwhelming importance that the nation generally is sure to be badly off if farming goes badly. Now, there is danger of thinking too much and insisting too much on this line of thought. In a continually decreasing degree the people of England look to the farmers of England for their food, and in a continually increasing degree they look to the farmers of other lands. Just now the nation rests in the lap of plenty. But it finds that rest in a foreign source quite as much as it finds it at home. In the old days, when the sources of supply were in the hands almost exclusively of our home farmers, everybody was directly interested in the well-doing of those farmers. But trade, with its huge bulk, has overshadowed farming until the burly form of John Bull has become dwarfed. Some day or other probably there will be reaction, and either from natural causes or from the disturbance of war, the produce of our own soil will be more valuable. Meanwhile, there can be no harm in farmers trying to take up such a position in general politics as their importance demands. It is acknowledged that, relatively to trade, their importance has of late years become less. How much farmers have themselves to thank for this it is hard to say. But it is at least certain that trade has formulated and developed plans of political action much more than agriculture has yet done.

June Weather Report.

Prof. Snow, in his June weather report says:

A cool and unusually cloudy June, with rainfall only about half the average. There were only three "hot" days—days whose highest temperature reached or exceeded 90 degrees. Of eighteen Junes five have been cooler and twelve hotter than this.

Mean Temperature—72.57 deg., which is 1.23 deg. below the June average. The highest temperature was 92 deg. on the 12th and 25th; the lowest was 51 deg., on the 9th, giving a range of 41 deg. The mercury reached 90 deg. only three times, which is six times below the June average. Mean temperature at 7 a. m., 68.73 deg.; at 2 p. m., 80.05 deg.; at 9 p. m., 70.75 deg.

Rainfall—2.38 inches, which is 2.65 inches below the June average. Rain fell on twelve days. There were 5 thunder showers. The entire rainfall for the 6 months of 1885 now completed has been 15.83 inches, which is 1.27 inches below the average for the same months in the preceding 17 years.

A damaging storm and flood visited the Neosho valley last week. A dispatch from Neosho Falls, in Woodson county, of the 3d inst., said: "All of the east part of the city is under water. In the bottoms the crops are all gone and most of the stock drowned. So far as known, no lives are lost, although many families have been driven to the second story of their dwellings, and the floors of the business houses on Main street are covered with one to five inches of water. It is about twenty inches deep in the main street in front of the postoffice. All the dwellers in the

northeast quarter of the city have moved, and during the night the firing of guns and ringing of bells have been heard up the river, and fears are entertained for the safety of some families. All the boats are out rescuing them, but the rise was so sudden nearly all the boats escaped on the morning of the 2d." On the same day, news came from Burlington, Humboldt and Parsons, all of like tenor. The river at Humboldt was three feet higher than ever before, so far as memory of white men goes. Three railroad men were drowned near Parsons when attempting to cross Labette creek in a skiff. Three other railroad men were drowned about twenty-five miles south of Fort Scott, by the giving way of a bridge when a train was crossing. Rains and floods had loosened the abutments.

Flies at Milking Time.

One of the most annoying things on the farm is the presence and attention of flies at milking time. The trouble is so universal that it needs no explanation. The mere mention of it has the effect to bring up the "time, place and circumstance" of every one of a thousand evening milkings when flies drew away every hope of comfort during the operation of milking. Remedies without number have been proposed, applied and failed. Some have practiced painting or washing the cow with pennyroyal or tansy tea, some have hung walnut leaves over her body, some have set the children to brushing off the flies with bushes, some have reduced the labor to a minimum and simply swore, while still others kicked the cow.

But better times have dawned upon the suffering milker; or, at least they are ready to dawn; if he will listen and take good advice. One man has solved the problem by simply throwing a canvas cover over the cow. He says that "works to a charm." Another man has a better and cheaper remedy, provided the milker has what he most needs—a barn. This man, answering a forlorn milker who, in despair, related his troubles, says that if, "when next time comes round he will arrange so that the milking stable can be darkened while milking, to a rather deep twilight, he will find that the musical hum of the flies will subside, and that he can milk without any provocation to indulge in free quotations from the imprecatory psalms, or other methods of relieving overwrought and pent-up feelings. For the last three years the writer has kept his one-cow dairy in a darkened stable during the day throughout the summer to save it from the annoyance of flies, furnishing green food in the manger. It is gratifying to see the comfort which an animal enjoys under such conditions, in comparison with the torment to which it is exposed without protection from the flies."

The exercise of a little ingenuity will work wonders in this matter of milking in fly time. Every person knows the effect of darkening a room in summer when flies are annoying in the lighted room. While the room is lighted one could not sleep; but darken it and the flies behave orderly enough. The same thing will happen if the stable is darkened. If one has no stable, he must be a poor planner if he cannot fix up a hay or straw stable that can be darkened during the milking time.

At a recent meeting of the Douglas County Horticultural Society, it was determined that the apple crop of the county would not exceed 25 per cent. of a full crop. As to small fruits, reports varied, but none showed more than averages. One member said the codling moth remains in the apple on the trees and if it falls to the ground

it remains until it is ready to wind itself up into a cocoon. Hogs will, if permitted to run in orchards, destroy many of the worms. The first brood are now at work. Now is the time to bandage the trees, even till gathering the fruit in the fall. The curculio is now going for the plums, and he should be treated to a solution of Paris green or soap.

Inquiries Answered.

REPORTS.—A request in writing to the Secretary of the State Board of Agriculture at Topeka, will secure a copy of his report if the books are not all disposed of.

INSECTS.—The specimen sent us by F. N. R. is too much crushed to distinguish readily, but it looks more like the peach borer than the curculio. It is true that plum curculios are sometimes found on apples.

NASAL GLEET.—If this disease has gone very far, killing the horse is the safest remedy. In the early stages it may be helped a good deal and sometimes cured by syringing the nasal passages. Dr. Manning recommends a mixture of one ounce bayberry bark in one pint of boiling water; when cool, strain through a close linen or flannel cloth; inject daily. He advises, also, to give daily in the feed one ounce of the following: One part each of grains of Paradise, white mustard seed, powdered sulphur, powdered charcoal. Give occasionally in gruel one-half ounce balsam capaiba, two drachms sweet spirits of nitre. Keep the animal warm, and feed soft, nutritious food.

THE MARKETS.

By Telegraph, July 6, 1885.

STOCK MARKETS.

Chicago.

The Drovers' Journal reports: CATTLE—Receipts 5,200, shipments 2,200. Shipping steers 4 75a 60, stockers and feeders slow at 3 00a 40, through "exs" cattle firmer at 2 75a 30. HOGS—Receipts 16,000, shipments 300. Market opened 5a 10c higher but close weak. Rough and mixed 3 90a 07 1/2, packing and shipping 4 20, light weights 4 00a 40. SHEEP—Receipts 1,500, shipments 200. Market dull and weak. Natives 2 00a 00, Texans 2 00 a 30, lambs per head 1 00a 25. The Drovers' Journal special Liverpool cable quoted prices 1/4c higher; American cattle 16c per pound.

St. Louis.

The Midland Journal reports: CATTLE—Receipts 600, shipments 800. Market scarce and firm at full prices. Native shipping steers 4 80a 50, good butcher steers 4 50a 50, mixed butcher stock 3 25a 25. HOGS—Receipts 2,100, shipments 3,100. Market active and firm. Yorkers 4 20a 45, packing 3 90a 45, butchers' 4 20a 45, light 4 25a 45. SHEEP—Receipts 1,100, shipments 1,900. Market steady. Common to fair 2 25a 30, good to choice muttons 3 25a 40, Texans 1 65a 25.

Kansas City.

CATTLE—Light market. Sales ranged 3 50a 40. HOGS—Receipts 2,410. Range of sales 3 75a 40, bulk at 3 80a 30. SHEEP—Fair to good muttons 2 60a 30.

PRODUCE MARKETS.

New York.

WHEAT—Easier. Receipts 111,400 bu., exports 91,683 bu. Sales: 185,000 bu. spot. No. 2 Chicago at 93 1/4c delivered, ungraded spring 85a 97 1/2c, ungraded red 85a 92c, No. 2 red 1 00 1/2a 01. CORN—Lower, closing dull. Receipts 421,871 bu., exports 206,648 bu. Ungraded 50a 54 1/2c, No. 2 53a 59 1/2c.

Chicago.

WHEAT—Sales ranged: July 86 1/4a 86 3/4c, August 88 1/4a 89c, September 90a 91c. CORN—Quiet but steady. Cash 47 1/2a 47 3/4c. OATS—Ruled easier and were a shade lower. Cash 31 1/2c. RYE—Easier. No. 2, 60c.

St. Louis.

WHEAT—No. 2 red, cash 93 1/2a 94 1/2c, July 93 1/2a 94 1/2c. CORN—Steady and firm but very slow. No. 2 mixed, cash 44 1/2a 44 3/4c. OATS—Dull but firm. No. 2 mixed, cash 21 1/2c. RYE—Dull at 59c.

Kansas City.

Price Current reports: WHEAT—Daily elevator receipts 17,782 bus., withdrawals 14,936 bus., in store 703,890. Wheat was weak again to-day. No. 3 red winter, cash 63 1/2c bid 65c asked; July 64c bid 64 1/2c asked. No. 2 red, cash 72c bid 72 1/2c asked; July 72 1/2c bid 72 3/4c asked; Sept 5 cars at 78 1/2c, 10,000 bus at 78 1/2c, 5 cars at 78 1/2c; Oct 5,000 bus at 81 1/2c. CORN—Daily elevator receipts 10,589 bus., withdrawals 11,335 bus., in store 198,759 bus. Corn was easy to-day and No. 2 was entirely nominal both on the open board and call board. July sold at 42 1/2c against 42 1/2a 42 3/4c on Friday. RYE—No. 2 cash, 45c bid 49c asked. OATS—No. 2 cash, no bids nor offerings; July 22 1/2c bid 28c asked. BUTTER—Supply fully up to the demand in all grades and ahead in some. We quote creamery lower. We quote packed: Creamery, choice..... 15 a Creamery, fair to good..... 13 a 14 Creamery, held stock..... 8 a 9 Choice farm dairy..... 14 a 15 Fair to good dairy..... 10 a 12 Storepacked, grocers' selections..... 7 a 9 EGGS—Supply ahead of the demand and market dull and unchanged at 9c for candled and 7 1/2c for uncandled. FLAX SEED—We quote at 1 08a 1 10 per bus. upon the basis of pure. CASTOR BEANS—Quoted at 1 40a 1 50 per bus.

Horticulture.

About Summer Pruning.

As to whether summer pruning is good or bad, and whether it is ever useful or ever hurtful, people differ, and yet, probably, every farmer has had experience at different times which tends to teach both ways. Experience is the best teacher, but we do not always understand our experience nor correctly interpret what we see or think we see. In all our experimenting it is necessary that we should take note carefully of what we are doing, and we should understand clearly what we want to do, and then observe closely every result. It is also important that we compare effects of similar operations on trees and vines and shrubs of different varieties and habits. It is very important that we study and remember the character and tendencies of different trees, as to shape, leaf, style and direction of shoots, etc. It is always more practical to take lessons from trees than from books, and much more useful, though books are great helps often. Most of the fruit-growers, however, obtain all their botanical knowledge wholly from practical work among the trees.

The writer of this, in his early experience, was very much afraid of summer pruning. He had heard it said that the trees would "bleed to death." In practice, however, he learned something. He saw sap ooze freely and fall off in drops from a grapevine pruned in early spring when weather was warm, and he saw vigorous and fast-growing canes broken off by accident in June and July, live and not bleed a drop. He saw branches of trees broken off by accidents and by storms in midsummer, and no perceptible injury result. Such observations set him to thinking and experimenting, and now he prunes whenever he thinks it ought to be done, without regard to time. Within ten days past he cut back the tops of some box elder trees. They are young, set out mere twigs two years ago, and now measure two inches in diameter, and the branches had grown so long—four to six feet, that they were hanging down in the fashion of a weeping tree. Box elder is not of the weeping class, and to let the branches grow in that way would be to spoil the tree. So they were cut back to about one foot, and now at every joint where leaves put out, new shoots are growing well. They are four inches long when this is printed, and they, or some of them, may have to be cut back before the leaves fall in order to prevent the wood going into winter too green. In wet or otherwise specially favorable seasons, branches on young trees of every kind have a tendency to grow long and without any laterals. The vigor of the tree goes into the fast-growing runners, and these are slender and limber, just what the owner does not want. He wants a strong and branching top. If he leaves the long branches to grow as they will, he must cut them back the next season, for they will spoil the tree as to appearance and as to fruitfulness. Young apple trees will, if unchecked, sometimes send out shoots six to eight feet long in a single season. By cutting them back at the proper time, lateral branches start, the main limbs become heavier, thicker, harder, stronger, the tree takes a better shape, the wood matures better, and the tree in many respects is benefited.

The object of pruning is not to interfere with nature, but to get rid of useless and injurious growth and to make the best or the most of the tree or vine. The writer was asked one day

why he was removing some lower branches from trees intended chiefly for shade. When informed that shade is better if made by shadows of high objects than if made by shadows of low ones, the questioner saw there was some reason in the work, and when he was still further informed that low swinging branches are not only in the way of persons who would move about under them, but that grass will not grow there and hence a lawn cannot be kept under thick-growing and low-spreading trees, it was evident in pruning there is or ought to be an object.

Summer pruning, just like pruning at any other time, ought to be subject to the object in view. Generally what we want to accomplish is to get as much of the season's growth as possible where it will do the most good, and surely that is not in long switches that must be cut off the next year and thrown away. And then, too, there is a great deal in the age of the tree and in the kind which will indicate what ought to be done in the way of pruning and how much. After a tree of any kind has attained permanent shape and direction, it needs very little pruning at any time. On healthy fruit trees there will always be more or less growth of useless limbs, as suckers, and they ought to be removed. But the tendency to run to long shoots ceases after the tree has become well established and is able to hold its head up, as we would say, concerning men. And when that time comes in the history of a tree, the growth usually is regular, going to every part alike. In such cases a little work every spring is all that is needed.

The object, then, of summer pruning has reference chiefly to the shape and direction of the tree, and in both these respects, the nature of the tree and its use must be considered. Having these primary ideas fixed in the mind, summer pruning is proper whenever it will tend to accomplish the end sought.

Horticultural Notes.

It is said that an application of diluted carbolic acid is a specific remedy for rose and plant vermin.

Currants are liable to injury now by insects. Examine them closely and destroy intruders. Also mulch well.

When leaves curl and turn brown, there is a nest of eggs there. Go for them and "kill, slay and destroy" them.

Injurious insects are very busy now. They need special attention. One person can destroy a great many of them if he improves every opportunity.

It is a good time now to thin beets, if it has not already been done. All should be removed from the rows except one every six or eight inches. Those removed may be used on the table or replanted in other rows.

Trees attract birds; birds help to cheer the home; a cheerful home is heaven on earth. Trees have many good influences on home life. Let every reader of this think himself into a determination to have more trees on the place next year.

We wish every reader of this paragraph would look over his premises and see how much he can plant to trees next spring, and then arrange work so as to accommodate the idea. The value of trees about a place is absolutely incalculable.

As soon as tomato vines are well up, build a little frame about them on which they may lie when they fruit. The frame may be made very cheaply. Bits of boards one inch by two, and two feet long, may be pointed at one end and driven into the ground for posts, and sticks of any kind almost may be laid on them and tied there with wrap-

ping cord. As soon as the vines begin to rest on the sticks they become braces to strengthen the frame laterally.

If you have never had any experience as to the effect of pruning, select a long, tender branch or cane now and pinch or cut off the end of it, and then watch the result.

See that the rose bushes are kept free from insects. Sprinkle strong soap suds over them. It is very good. Also clean away all weeds and grass about the roots, dig some fine manure into the ground and then leave a pile of the same or coarser about six inches deep around the stems.

The Poultry Yard.

How Many to the Acre.

Those of our subscribers who wish to go into the poultry business extensively, and yet are limited in regard to room, may be aided by the following suggestions:

First, do not mass your fowls. If you have but one acre of land to devote to poultry, divide it into eighths, and put not more than twenty-five to a flock, which will make room for two hundred fowls. The same area will not keep fifty if allowed to run together, as well as the larger numbers separated. In fact, two hundred fowls will hardly flourish on five acres if kept *en masse*. Let your motto be small flocks and complete separation.

It is not natural for fowls to run together in great numbers, promiscuously. When a great number of fowls are purchased from different sources and brought together they are afraid of each other and fight almost constantly for a number of days, or till they become acquainted. When a flock is of the proper size, each individual is acquainted with every other; just as well as a scholar in school knows every one in his class. Also every fowl in a smaller flock knows the relative strength and courage of the rest. There is one that is the "boss," able to beat any one of the others. Then there is number two, number three, and so on. When they become all settled down, and each one knows its place, there is order and quiet. Without this order and quiet there can be no thrift. All gallinaceous birds live in this way, in a state of nature, the wild jungle fowls, the parent stock of our domestic fowls, included. Each family group has, by tacit agreement, certain district for its beat. If a member of any group or family strays over the line it is regarded as an intruder and driven back.

If we substitute for this state of things, a mob, or heterogeneous assemblage, the fowls are kept in a continual state of worry. The hereditary family instincts are violated, and the laying is checked.

On a village street where the houses are ten or twelve rods apart, each resident can keep a flock of thirty fowls or so, and when there are no fresh purchases made, and the birds have all settled down to business, they stay at home and rarely intrude on the range of neighboring flocks.

We receive a great many questions in the course of a year, regarding the proper allowance of ground for a flock of twenty, or fifty, or one hundred fowls. To begin with, there should be no flock of one hundred fowls at all. Twenty to thirty is the maximum number; perhaps in some cases fifty. Now, how many fowls to the acre? Well what is the object to be attained? Is it simply to afford place to run around in; or is it to give a chance to pick up something to eat? If the latter, does the poultry-keeper aim to secure vegetable forage or insect forage, or both?

One thing is certain, if it is expected that fowls will pick up insect food, as well as vegetable food, it will take four or five acres, to give good foraging ground, for three or four flocks, of twenty birds each. Grasshoppers and crickets and various other insects need space and a variety of vegetation, in order to get a living, so that they may be in turn consumed by the fowls. If there is a large pasture used for horses or cattle, and but a small number of fowls, it may be profitable to raise the animal food as well as the vegetable food for your poultry. In this case, they can have the range of five or ten

acres or more. They will thrive exceedingly well under such circumstances. Leghorns, especially, may frequently be found a fourth of a mile or more away from the fowl-house. A flock of Leghorns, under such circumstances, will make use of a range of over eighty acres.—*Poultry-Keeper*.

A Poultry House.

Henry Stewart, a well-known agricultural writer, describes a new poultry house he has just built, and which he considers the best he has constructed: "For fifty fowls it is twenty-four feet long, ten feet wide, five feet high in the rear, and eight feet in the front. The sills are four by six inches; the studs two by four inches, and the boards are novelty siding, which fit very closely and make a wind-proof wall. The roof is of matched boards, covered with tarred roofing-felt. The house is divided into two parts by an enclosed passageway in the middle five feet wide. This is used for setting hens. The partitions are made of laths. The roosts are one by two-inch strips, made into a rack or frame hinged to the joists, so that it can be raised back to the wall out of the way when the floors are cleaned. The floor is the earth, which is dry and dusty, and is supplied with fresh soil or coal ashes all over when it is necessary to renew it. Each apartment has a large sash of twelve lights, of ten by twelve-inch glass, put in loosely, so that it can be taken out in the summer and replaced by a frame covered with wire netting of two-inch mesh. This is necessary to keep out vermin, and it affords perfect ventilation. The entrance-holes are under the windows, and have each a slide for the purpose of closing them at night. The entrance-door is in the centre, and opens into the central passage, which has a door on each side opening into the roosting places. Finding, last year, a need for a separate place for young broods very early in the spring, I put an annex, made of sash, at the east end, six feet wide, in which the coops could be placed when too cold to put them out doors. There is a yard less than a quarter of an acre around the house, enclosed with Sedgwick wire fence, in which are several plum trees. Another yard of about the same size is attached at one end for alternate use, as I have already explained. Each yard is plowed up when the other is used. I have now fifty fowls in this house."

Poultry Notes.

A few fowls in separate pens are much more profitable and more easily kept healthy than in large numbers.

As hens require a deal of water, drinking only a small quantity at a time, it should be supplied abundantly, and kept clean and fresh.

Mr. Ayres says that the Plymouth Rocks "are probably the most perfectly adapted to all climates and localities of any of the modern varieties of standard fowls."

Ventilate the buildings where your poultry is kept, daily—no matter how cold the day may be. Let the foul air out and the fresh air in amongst the birds. Thus *only* can you keep them healthy in confinement.

Good hen-manure from fowls which have been liberally fed is worth as much as guano. It should be put into barrels as soon as taken up from the chicken-house, kept in a dry place till wanted, a little plaster mixed with it, and before using pounded up fine. Apply it the same as guano.

Wheat fed whole to laying fowls, and wheat screenings or cracked wheat fed to young chicks, have always produced the most desirable results, though it must be remembered that they must not be fed in the same quantities as corn or preparations of corn. The tendency of wheat is to produce a healthy growth, feed the muscular tissues, and aid materially in causing the hens to lay often, and rich eggs.

Modified Cholera.—I hope ere long to go fully into the questions raised by S. J. P. I now wish to advise him to try, as a curative for this or similar diseases, the chemical known as hyposulphite of soda. I have come across some wonderful results from the use of this, which can be obtained from any drug store, both as a prevention against disease and as a curative. For destroying internal parasites or congregations of mucus, and for clearing the intestines of foul matter, its effect is really wonderful, and as now it is settled that nearly all diseases are the result of germs, the effect of this hyposulphite of soda can easily be understood. It is in the form of crystals, and can be dissolved in water, of which solution a teaspoonful to each bird should be given twice a day. The best method of administering liquid medicine like this is to fill a ball syringe, and having inserted the nozzle into the mouth of the bird, squeeze the ball, and thus compel it to swallow the dose. I do not say the soda will cure crop-bound when fully developed, but will often prevent it when taken in time, and will cure foul-crop and stomachic diseases.—*Stephen B. Ale*.

In the Dairy.

Essentials in Dairying.

An address delivered by T. D. Curtis before the Mississippi Valley Dairy and Creamery Association, at St. Louis, March 5, 1885.

We copy from the *National Live Stock Journal*, Chicago:

Some of you may think that what I have to say is trite and commonplace. So it is to those familiar with the subject. So are A. B. C. and A. B. ab, to those educated in letters; but it is very essential that they should be taught to every beginner. So I shall assume to speak for the benefit of beginners in dairying, and I think those who may have the patience to hear me through will admit that the most elementary points are the most essential.

A DAIRYMAN.

The first essential in dairying is a dairyman. This may strike you as self-evident, but I assure you it is no uncommon want. Perhaps as many failures come from the want of a dairyman as from any other one cause. It is not every man who owns a dairy that is a dairyman, any more than the man who owns a few paintings is necessarily an artist. Money will obtain either cows or pictures, but money will not of itself run a dairy or paint a picture; nor does it follow that the owner can do either. On the contrary he may be destitute of all the qualities essential to a dairyman or an artist; and the informed mind will be able to judge somewhat of his qualifications by the selections which he makes—either of cows for his dairy, or pictures to adorn the walls of his home. It is, therefore, not so very absurd to declare that the first essential of dairying is a dairyman. I think it requires as much knowledge, intelligence, and judgment to select a good dairy herd as it does to select a good gallery of pictures. Yet it is generally supposed to require a man of education and refinement, with good taste, and some knowledge of art matters, to select the pictures, while any ignorant dunderhead may get up and run a dairy successfully! But the public judgment in regard to the dairyman has got to be reversed. The time has come when no branch of agriculture can be run by a blind routine. Hitherto the benefits of education, of scientific culture, have been reflected on agriculture only indirectly, through improved machinery and implements. "Book farming" has been sneered at as only theoretical and absurd. But "book farming" is coming forward to drive the sneerer off from his farm, or to bury him hopelessly beneath the debris of disastrous failure. To use a modern slang, but very expressive word, the man who ignores the instruction of books will "get left." The era of the "survival of the fittest" in farming is dawning upon us, and the period is rapidly approaching when the highest culture and greatest ability will be demanded on the farm. Dairying, as a branch of farming, is no exception to the rule. Hence I say, the first essential in farming is a dairyman. We have already reached the point where it is beginning to be acknowledged that not every fool is capable of selecting or rearing a dairy herd and running a dairy. The first thing to be considered, then, in the practice of dairying, is a dairyman. If you have not the knowledge and judgment yourself, be sure that you get the best services of one who thoroughly understands the business. He must not only know a good cow when he sees her, but how to feed and care for her, and how to handle her milk and manufacture the product. He must be intelligent, cleanly, systematic, and thorough, and do everything at the right time, in the right place, "decently, and in order." Gentlemen, a dairyman is no uncommon want, nor is he to be picked up on every cross-road. The demand for educated dairymen is increasing, and will continue to increase for many years.

A DAIRY FARM.

The second essential in successful dairying is a dairy farm. It is not every farm that is advantageously fitted for successful dairying, although, undoubtedly, there are but few farms on which dairy products may not be manufactured. But the farm that has sweet springs and running brooks of clear water has an advantage of one not possessing these sources of water supply; and a farm on which the tame grasses readily take root and form a thick, enduring turf for both pasture and meadow is much better adapted to dairying than

one that has to have the turf turned over every two or three years. Such permanent pastures and meadows are not only labor-saving, but furnish a greater variety of grasses, and, therefore, more nutritious and better-balanced feed for dairy or any other stock. If no permanent turf can be formed, pasturing can not be profitably resorted to, as the hoof of the cattle will poach the soil and destroy more grass than will be consumed as food. On such land, soiling would be the sensible thing to do, and this, under proper conditions, has some advantages. In adopting soiling, it would be necessary to grow a variety of crops in order to furnish balanced rations for the stock, and thus supply, in a measure, the variety which is secured by permanent pastures and meadows. And here would come in the proper construction of buildings with reference to ventilation, cleanliness, and the healthfulness of the stock—a subject too extensive to be fully discussed here. I should much prefer for me, all things considered, a soil on which permanent pastures and meadows are possible, as I could then resort to soiling to any extent that I chose, or not practice it at all. So I think springs and brooks of pure water are to be preferred, though it is not impossible, in many cases, to get a supply of water from wells, lakes, and large ponds. Dairying, with the modern improved apparatus, can be carried on with much less water than was formerly supposed to be necessary. But the water must be free from deleterious, mineral, and all other impurities, since bad water has a very marked effect on the quality of the product. It is found, by our eastern experience, that the uplands furnish not only the best water for dairy purposes, but the best feed also. There is a freshness, sweetness, and richness in the grasses of the hillsides that is not found in the grasses of rank growth on the low lands and in the swamps and swales. The quality of the soil has a marked effect on the quality of dairy products; and I may go farther, and say that the hill pastures, if not improved and run down, produce the sweetest and best beef. But very much depends on cultivation and freedom from weeds that may impart a bad flavor to milk or beef. The dairyman is the essential factor in keeping the soil clean and in proper condition.

THE DAIRY HERD.

The third essential is a good dairy herd. In starting, this must be selected and purchased—a task which is very difficult to perform successfully. This devolves upon the dairyman, and the intelligence with which he performs it will be a pretty good index to his future success. The difficulty of finding for sale such stock as he wants will be the chief stumbling-block in his way if he understands his business—provided, the man he buys of in every case understands his business also, and sells only what he ought to sell—the poorest of his herd. It is not every owner of a dairy herd who knows his best cows. In the first place, very few test their cows as they should, to know which is the most profitable cow to keep; and, in the second place, a good cow may do poorly if she is not properly kept. As a rule, a good cow can not bear a great deal of hardship, and if subjected to it, she does poorly; but give her good keep and care, and she will reward her owner handsomely for all he does for her. So it may happen that a man who does not properly care for his herd will sell his best cow under the mistaken impression that she is a poor one. When it comes to a question of endurance, the poor cow will stand more and be affected less in her milk yield than the good cow will. The good cow is apt to be rather tender and sensitive, and almost the first effect of harsh treatment will be shrinkage of her mess of milk.

Care should be taken, however, to secure stock with good, sound constitutions as the foundation of the future herd; for, though a good cow may be very sensitive to surroundings, it does not follow that a weak and sickly cow is a good one. Look for good lungs, good digestive organs, large udder, and milk veins, with the general milk form of the cow, and all the other signs considered indicative of a good milker and of milk of good quality. In picking up such stock, of course pedigree can not be considered. You must select the animal on individual merit, and trust to her breeding qualities, which may or may not be good. If she comes of a long line of good milkers, so much the better.

A herd once secured by selection and purchase, the better way to keep it up

and improve it is by breeding. In exceptional cases, you may here and there be able to pick up cows that will really be an addition to your herd. But the slow and sure way is to get the best male you can for your line of dairying—one good individually and with a good pedigree—and use him in breeding from your best cows. Never trust to a scrub or grade, however promising in appearance, but use a pure-blood male, and continue to use only pure blood on the male side as long as you run a dairy. The male is half of the herd in breeding. So you cannot afford to have uncertainty on the female side. But keep pouring in the pure blood, selecting and rearing the heifers from the best cows, and in a short time you will have high grades as good for all practical purposes as pure-bloods—and sometimes of stronger constitution and better. This mode of keeping up and improving a herd is open to all.

But do not allow yourself to be fooled by appearances. Put every one of the cows to the test individually, and know just what you can get from her. If you have never made individual tests, you will be astonished at the results. The cow you thought best may prove to be the poorest, and the supposed poorest cow may prove to be the most profitable one in your herd. If your line of dairying is cheese, test for the amount of curd you can get from the milk; if it is butter, test for butter by using the churn, which is the only practical and certain indicator of the value of the butter cow. It is not the amount of butter in the milk, but the amount that you churn out, that decides the butter value. The milk may be very rich in butter, and the chemist may be able to show conclusively that it is there, and yet you be unable to separate it from the milk by setting, or by churning. Even but a small percentage of butter in the cream that is raised may be separated by the churn. Why? It is supposed to be because the butter globules are so small that they will not separate from the buttermilk and cohere in a mass. These globules are found to range from 115-100ths to 127-1,000ths of an inch in diameter. It is found that milk having large fat or butter globules churns easily and quickly, and that which contains small ones churns with greater difficulty, and requires more time. Hence, milk rich in butter may be poor for butter-making, because you can not separate it from the milk, but it will be excellent for cheese-making, for marketing, and for general consumption. So other milk, containing large butter globules, may actually yield more butter than it contains fat. This may at first appear strange, but it is easily explained. Nearly all the butter separates from the buttermilk, but it carries with it more or less caseous matter and a percentage of water. Ordinarily, there is about 15 per cent. of water in butter, but I am assured by scientists that it may be made to contain as high as 25 per cent. of water. This caseous matter and water, of course, adds to the weight, and may make the yield of marketable butter actually more than the chemist can get out of the milk by analysis.

It is not a good cow that makes less than 200 lbs. of butter a year; nor a good cheese cow that makes less than 500 lbs. of cheese. The herd ought to average these amounts, and the best cows to considerably exceed them. I would not keep a single cow, if I could have my way about it, that did not come up to these annual yields, making the average considerably above.

In selecting and rearing a herd, the special line of dairying in which you engage should be constantly in view. If it is cheese, see that you have a large yield of milk, rich in caseine, and select your male from the best cheese family, of a cheese breed. If for butter, see that you get milk rich in butter, and sufficient in amount to make the cow profitable; and also be sure to use a male from the best butter family, of the best butter breed. In this way you will at least maintain the status of your herd, and the chances are that you will make some improvement. This is the straight and narrow way along the path of progress.

For cheese, I would recommend the North Holland or Friesian cows, many of which are found among the so-called Holsteins. The Dutch-Friesians are mainly of this breed, those of the other breeds among them being accidental exceptions. Next, I would recommend the Ayrshire. For butter, I would recommend the Jerseys and Guernseys, well selected; and, next to the Jersey, the Devon. For both butter and cheese, I would recommend the North Holland or Friesian, the Ayrshire, and the Short-horn. Among the "natives," or common stock, are individuals that excel as butter cows, and those that excel for cheese production.

So there are among them occasional good general-purpose cows; but their characteristics are not fixed and uniform, and we cannot depend upon common stock males for breeding purposes. This is the crazy-quilt breed.

CARE.

Good care of the cow is essential. By care I mean attention to not only what is necessary for the maintenance of health, but to what will make her comfortable and contented. Give her good shelter at all times—from the hot sun in summer, the chilling rains of spring and fall, and the frosts of winter. Indeed, at all seasons or the year, dairy stock should have clean, well-ventilated shelter to which they can repair at will. You will be surprised, if you never tried it, to see how often they will retire to this shelter, and how much of their time they will spend there ruminating after having filled the stomach. You may not think shelter here in Missouri is of as much consequence as it is farther north. If so, I think you are mistaken. Your stock is not prepared to stand the severe weather that our northern cattle can bear; and hence I imagine the cold that does strike them here pinches them about as much as our severer cold does our stock. In fact, it is not always the coldest weather that causes the most suffering, as by the time it comes on, the cattle get inured to the cold, just as we do, and do not mind it as much as they do the first chilling blasts and storms of the fall season. It is a great mistake to allow animals to suffer at that season of the year for the want of shelter and food. They will, in a short time, lose more than they will gain all winter. Do the best you can by them. It is equally reprehensible to expose them to cold, spring storms, after being sheltered and dry all winter. It will cause new milk cows to shrink materially in their flow of milk; and though it may seem to afterward recover, I doubt very much if it again comes up to the point that it would have reached had the cows been properly sheltered. It pays to keep dairy stock well sheltered and warm. It pays to resort to artificial heat to keep up the temperature of the cow's body by warming the stable and the water she drinks, allowing her in no case to get chilled by exposure. The Hollanders put their cows into the stable in the fall, and they do not leave their stalls for a moment until turned out to pasture in the spring. Yet, notwithstanding this close confinement and lack of exercise, they remain healthy, sleek, and contented. But their stable is kept scrupulously clean, all droppings being immediately removed. Experiments in this country point to similar good results from keeping cows warm and quiet. If in milk, the flow is considerably increased thereby, and improved in quality. Fuel is cheaper than food to keep a cow warm, and warmth is an essential to the best results in winter dairying. Even in summer, it will be found that the cows give the most milk in the hottest weather, and that the flow shrinks and swells as the thermometer goes down or goes up. This is our northern experience. We can hardly pay too much attention to temperature as an essential condition in dairying.

(Concluded next week.)

"Talking about funny things," said a big, bronzed, bearded man in the reading-room of a hotel Saturday night, "the funniest thing I ever heard of happened in my saw-mill out in Michigan. We used a heavy, upright saw for sawing heavy timber. One day not long ago the men had all gone to dinner, leaving the saw, which run by water power, going at full speed. While we were away a big black bear came into the mill and went nosing around. The saw cut his fur and twitched him a little. Bruin didn't like this for a cent, so he turned around and fetched the saw a lick with his paw. Result—a badly cut paw. A blow with the other paw followed and it was also cut. The bear was by this time aroused to perfect fury, and rushing at the saw, caught it in his grasp and gave a tremendous hug. It was his last hug, and we lived on bear steaks for a week. When we came up from dinner there was half a bear on each side of the saw, which was going ahead as nicely as though it had never seen a bear. This is a fact, so help me Bob," and the big lumberman bit off a fresh chew of tobacco.

While Mr. Robert Bonner was inspecting John Turner's horses in Philadelphia the General told a curious story of horse training. "When I was a boy, and \$200 looked as big as a million, I had a horse matched against a pacer to go a single mile for \$250 a side. In training him I discovered that through excess of action he hit his arms. I was in despair, when I was advised to try and put him in condition by swimming. Like a drowning man, I grasped at a straw. The river ran near my door. I hired a man to row me in a boat, while I sat in the stern and held the halter. We started up stream, and the horse swam beautifully. On the return he struck out eagerly, and actually towed the boat. I kept this up for ten days and never brought a horse to the post in better condition. The violent action in the water had given pliancy and firmness to his muscles and made his wind as clear as the ring of a bell. I won the race easily, but it is lucky that it was a single dash, because through his faulty action he cut his arms into ribbons."

The deepest coal mine in the world is the Rose Bridge colliery, at Wigan, Lancashire, which is 808 yards deep, or almost a half mile. There is plenty of coal further down, but the heat in the solid strata is 93½ deg. Fahrenheit.

The Busy Bee.

Dividing Colonies.

To commence, I wish to state that methods which are possible of success will not suit us always, but we want the short practical system that is always certain of success. The method of artificial increase I am going to describe can be pursued either with combs and hives all alike, or if the bees are in hives very different from those which contain the empty combs.

Let us suppose that all the hives contain the same size and style of frames, both those with bees and those with empty combs.

First. Prepare your combs, by extracting all their honey, if they contain any, and scraping off all dirt and bits of comb and propolis, and getting out all the dead bees you can, by tunking them gently while at the proper temperature.

Second. When your living colonies become strong, and are ready for surplus room, place a super containing a full set of young combs upon each colony without any honey board between the stories. Soon the queen will place brood in several of the combs of the upper story and if each story contains eight combs, as ours do, you will have brood in eleven to twelve combs, and be storing surplus honey for the extractors as fast as the yield will permit. When swarming time arrives, likely this colony will not prepare to swarm, as they have plenty of breeding and storage room. At this time of the year, when the increasing impulse is in the air, if this colony is made queenless, without materially weakening it, they will rear as good queens as can be produced in any manner. The hive below, will likely contain brood in every comb, and the super have brood in three or four combs.

From all these select two or three combs with oldest sealed brood, and one of younger brood, but not much of it. Place these three or four combs with four or five empty ones in a hive on the old stand, and with them put the old queen and about one pint of bees, moving all the rest of the bees, brood and comb, to a new stand, and do this at a time of day when the bees are nearly or quite all at home, and smoke and drum the hive thoroughly, and place a narrow board in front of the hive for bees to bump their noses against when they fly out, which will serve them to mark their location, and at this season of the year, scarcely any will return to the old stand, but will remain and keep the old colony strong. Lots of brood and young bees will be there. Perfect queen cells will be built at once, and when these are about eight to ten days old, this colony may be divided into two parts, dividing brood and bees as nearly equal as possible, and placing each as nearly at equal distances from the old stand as possible, smoking and drumming in front of the hives as before. See that each part has a perfect queen cell; (it will be well if they have two cells apiece). Should either part catch more bees than to make all equal, change places with the one that has least.

This plan of equalizing works perfectly, and can be executed as quickly as I am writing it, if the hives are readily visible, and all alike as they should be. Fill up the vacant space in each hive with empty combs, and they will be covered and protected before injured by enemies. After about ten days more, look in each hive for eggs, and if in any one you should find none, wait five days more, and then if your search is fruitless, give them a cell, or a young queen at once.

The above is merely ONE of the many methods that will work well. After all, he who would succeed, must be familiar with the laws governing the economy of the hive. You may have your bees in one style of hive, and empty combs in another. In that case, it is not clear just how, or how much, the above directions must be varied. If you have Italian bees they will not act to a rule, with the same certainty that Germans do. You may not care to more than double your stock, when you can get all the queen cells you wish, by stimulating a disposition to swarm early, on the part of the colonies you wish to breed from, and using their cells as soon as sufficiently developed.

Many believe that queens begotten under the swarming impulse, are better than others. This may be a true evolutionary principle, and might show its

effect after dozens of generations, but as no one has ever yet practically proved it, (though many of us have believed it), it still remains a theory only. Once I sold the queens out of fifteen nuclei, about the first of October. I did not require them, but just neglected them, and let them sit, and they reared and successfully fertilized thirteen as fine looking queens as I ever saw, although some of the nuclei were quite weak. For a test I took these queens and superceded others with them, and noted their work and longevity, and I could detect no inferiority whatever. If such there was, it is one of such small amount that it cannot be detected in one generation.

Practical work in the apiary, is the only way one can become proficient in many operations. I have tested the Lamp-Nursery, and I cannot see but that it does its work to perfection, and it is a very convenient place to finish the queen development, after they have passed the nursing and capped point. It keeps an evenness of temperature, that cannot be found in any colony of bees. The method of rapid increase that we practice, as well as queen rearing, and forming nuclei, varies from the one above given, in so much as that we get many of our cells after natural swarming, and those that are forced, are from colonies with queens removed, and used to supply other divided colonies, or to ship. All these cells are hatched in the nursery, and the queens introduced unfertile, to our nuclei, or divided colonies. We introduce three days after queenlessness, (as near as we can) and seldom lose a queen. Where only moderate increase is wanted, I prefer natural swarming.

Of course all operations among bees must be done in accordance with certain laws governing their instincts. Sometimes we must perfectly coincide with them, and sometimes wholly or in part cross them. We must know just what these laws are, and be able to form a wise method of procedure according to them.

To be the better understood, let me mention a few of these laws, some of which we work by in making increase, queen-rearing, etc.

1st. Bees mark their location and seek the old stand.

2d. Bees can be made to re-mark a new location, and thereafter seek that.

3rd. When bees swarm, they desert the old location, determined to mark a new one.

4th. About swarming time, bees can be more readily induced to give up one location, and re-mark another.

5th. If bees are deprived of their queen they will at once rear others, if they possess eggs or larva under four days old.

6th. Stronger colonies, about swarming time, will build the greatest number of queen cells.

And we might go on till we reached the 100th, and yet much would remain to be told. We form a nucleus colony just when and where we choose, and spend but a few moments in getting the bees to stay where we want them.—James Heddon, in Kansas Bee Keeper.

Turkish ingenuity has circumvented the terrible month Ramazan, the Mohammedan fast. For thirty days, between sunrise and sunset, no good Mussulman allows a mouthful of food or drink to pass his lips. "But then," says a Constantinople letter, "it does not discommode the Turk at all, for during that time he is asleep. He simply reverses the order of things, and sleeps daytimes instead of night. There is no law against his eating at night. He rises from his couch at sunset and takes his breakfast before going to the mosque to pray. At midnight he has dinner, and partakes of supper just before sunrise in the morning, when he again retires to bed. The night not being good for work, he gives his whole waking hours to pleasure, and the entire month, from sunrise to sunset, becomes a vast carnival in all countries under Mohammedan rule.

A ring was made by a Mr. Gennet, of Richmond, Va., for Mr. Jacob Ezekial on the occasion of his marriage to Miss Catherine de Castro Myers, June 10, 1885. When the twin celebrated their silver wedding in 1860 Mr. Gennet added or welded another ring on the first one, and lately the two were sent to Richmond from Cincinnati, where Mr. Ezekial resides, for Mr. Gennet to attach the third ring to the others for the golden wedding.

A farmer of Peacock, N. J., while plowing recently, lost his watch out of his pocket and "turned it under." He did not miss it until night, and next morning he commenced plowing the ground over again, and soon plowed it up. The watch had been under the ground eighteen hours, and was still running.

THE STRAY LIST.

HOW TO POST A STRAY.

BY AN ACT of the Legislature, approved Feb 27, 1886, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisement, to forward by mail, notice containing a complete description of said strays, the day on which they were taken up, their appraised value, and the name and residence of the taker up, to the KANSAS FARMER, together with the sum of fifty cents for each animal contained in said notice. And such notice shall be published in the FARMER in three successive issues of the paper. It is made the duty of the proprietors of the KANSAS FARMER to send the paper free of cost, to every county clerk in the state to be kept on file in his office for the inspection of all persons interested in strays. A penalty of from \$5.00 to \$50.00 is affixed to any failure of a Justice of the Peace, a County Clerk, or the proprietors of the FARMER for a violation of this law.

How to post a Stray, the fees fines and penalties for not posting.

Broken animals can be taken up at any time in the year. Unbroken animals can only be taken up between the 1st day of November and the 1st day of April, except when found in the lawful enclosure of the taker up.

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

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

Any person taking up a stray, must immediately advertise the same by posting three written notices in as many places in the township, giving a correct description of such stray.

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

The Justice of the Peace shall within twenty days from the time such stray was taken up, (ten days after posting) make out and return to the County Clerk, a certified copy of the description and value of such stray. If such stray shall be valued at more than ten dollars, it shall be advertised in the KANSAS FARMER in three successive numbers.

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

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

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

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

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

Strays for week ending June 24, '85.

Norton county—A. H. Harmonson, clerk.

MARE—Taken up by Myron Follett, of Modell tp., May 25, 1885, one black mare, 12 years old, branded B up and B down on left shoulder, branded 3 and J with O on top end of letter on left hip; valued at \$20.

COLT—By same, one light bay male colt, 1 year old, left hind foot white; valued at \$20.

COLT—By same, one strawberry-roan male colt, 1 year old; valued at \$20.

PONY—Taken up by H. V. Love, of Modell tp., June 1, 1885, one light sorrel mare pony, 3 years old, has a hard lump under left eye, branded A 8 on left shoulder, brand on left hip supposed to be G L upside down and a bar on right hip; valued at \$12.

Sumner county—Wm. H. Berry, clerk.

HORSE—Taken up by Henry Wilson, of Walton tp., May 23, 1885, one sorrel horse, 14 years old, 14½ hands high, white face, three white feet, branded BS on right shoulder; valued at \$15.

MARE—Taken up by J. A. Reeve, of Conway tp., May 20, 1885, one bay-roan mare, 12 years old, star in forehead, collar-marks on shoulder, saddle and harness marks on the back; valued at \$35.

Morris county—A. Moser, Jr., clerk.

PONY—Taken up by A. G. Pickett, of Valley tp., May 9, 1885, one dark bay or brown mare pony, 14½ hands high, small white spot over left eye, brand on left hip and letter S on left rump, about 4 or 5 years old; valued at \$30.

Kingman county—Chas. Rickman, clerk.

MULE—Taken up by Elisha Powell, of Belmont tp., June 10, 1885, one dark brown mare mule, branded with a circle and 7; valued at \$40.

Pratt county—J. W. Naron, clerk.

COW—Taken up by Chas. S. Rooks, of Gove tp., (Laundale P. O.), June 4, 1885, one red cow, indistinguishable brands; valued at \$15.

Wabaunsee county—H. G. Licht, clerk.

HORSE—Taken up by Geo. F. Martin, of Kaw tp., June 1, 1885, one bay horse, 15 years old, 5 feet high, black mane and tail; valued at \$25.

Harper county—Ernest S. Rice, clerk.

MARE—Taken up by S. H. Carver, of Ruella tp., June 1, 1885, one bay mare, hind feet partly white and rope mark on left hind leg; valued at \$100.

Franklin county—L. Altman, clerk.

MARE—Taken up by D. M. Conner, of Richmond tp., May 14, 1885, one sorrel mare, 4 years old, slit in left ear, has a ring-bone on left hind foot, both hind feet white, has collar marks; valued at \$50.

Republic county—Y. R. Parks, clerk.

COW—Taken up by Geo. A. Tenpenne, of Richland tp., May 15, 1885, one brindle cow, about 4 years old, branded with a letter R on right rump.

CALF—By same, one sucking bull calf, light red, branded on right haunch with letter R; both animals valued at \$30.

Decatur county—R. A. Reasoner, clerk.

COW—Taken up by Christian Graves, of Bassettville tp. (Oberlin P. O.), one red cow with white spots on and under flanks and white spot in face, ears frozen or cut, 6 years old; valued at \$20.

Strays for week ending July 1, '85.

Butler county—James Fisher, clerk.

MARE—Taken up by J. B. Lee, of Little Walnut tp., one bay mare, 4 years old, about 15 hands high, hind feet white, small white strip on end of nose.

HORSE—By same, one bay gelding, about 15 hands

high; both have harness marks and leather head-halters.

Harvey county—J. C. Johnston, clerk.

HEIFER—Taken up by Alex Kerr, of Walton tp., May 6, 1885, one 2-year-old white heifer, hole in right ear; valued at \$20.

Brown county—G. I. Frewitt, clerk.

MARE—Taken up by Wallace Earhart, of Hiawatha tp., June 13, 1885, one dark bay mare, about 14 hands high, about 13 years old, branded on neck G. W., has lump on under side of neck; valued at \$50.

Wabaunsee county—H. G. Licht, clerk.

MARE—Taken up by Ira Hodgson, of Mission Creek tp., (Mission Creek P. O.), June 9, 1885, one bay mare, 15 hands high, 8 years old, some white on three feet, short tail, smooth-shod all around, no marks or brands; valued at \$75.

Linn county—J. H. Madden, clerk.

HEIFER—Taken up by I. Clanton, of Sheridan tp., November 6, 1884, one roan yearling heifer, swallow-fork in left ear, crop off right ear and bush of tail off.

Bourbon county—E. J. Chapin, clerk.

MARE—Taken up by J. D. Cony, of Pawnee tp., June 15, 1885, one sorrel mare, supposed to be about 14 years old, white face and left hind foot white, had on saddle and bridle and piece of rope around neck; valued at \$45.

Jewell county—Jno. J. Dalton, clerk.

MARE—Taken up by H. B. Helfenstein, of Limestone tp., May 21, 1885, one light dun mare, 14 hands high, horseshoe with letter C turned backward on left shoulder; valued at \$60.

Cloud county—L. W. Houston, clerk.

COW—Taken up by Thomas Olson, of Lyon tp., one red cow, 3 years old, branded 1 on left hip; valued at \$20.

PONY—Taken up by James J. Ward, of Nelson tp., one light cream-colored mare pony, about 6 years old, branded on left flank and left shoulder with what is supposed to be a Mexican brand; valued at \$16.

Crawford county—Geo. E. Cole, clerk.

HEIFER—Taken up by H. B. Williams, of Washington tp., June 4, 1885, one white heifer, 2 years old, branded on right side with letter I; valued at \$12.50.

HEIFER—By same, one red heifer, 2 years old, branded on right side with letter I, ring in left ear; valued at \$12.50.

HEIFER—By same, one white heifer, 2 years old, branded on right side with letter I, ring in left ear; valued at \$20.

Strays for week ending July 8, '85.

Elk county—J. S. Johnson, clerk.

PONY—Taken up by A. W. Farr, of Union Center tp., May 27, 1885, one black horse pony, 7 years old, pale horseshoe brand on left shoulder, head-halter on; valued at \$30.

PONY—By same, one light bay pony mare, 9 years old, branded S on right shoulder; valued at \$30.

Shawnee county—Chas. F. Spencer, clerk.

PONY—Taken up by O. D. Spencer, of Tecumseh tp., (P. O. Big Springs, Douglas county), June 22, 1885, a chestnut sorrel horse pony, about 8 years old, 4 feet 2 inches high, harness or saddle marks, no brands; valued at \$30.

Decatur county—R. A. Reasoner, clerk.

HORSE—Taken up by Zarl H. Claar, of Bassettville tp., (Hawkeye P. O.), June 7, 1885, one bright bay horse, about 8 years old, branded B on left jaw; valued at \$35.

Sumner county—Wm. H. Berry, clerk.

MULE—Taken up by William Barr, of Belle Plain tp., (P. O. Belle Plaine), May 18, 1885, one white mare mule, 15½ hands high, 16 years old, leather head-stall with rope hitch-rein, shod, harness marks; valued at \$50.

Ness County—James H. Elting, clerk.

MARE—Taken up by A. E. Cole, of Franklinville P. O., June 15, 1885, one dun mare, white strip in forehead, Spanish brands on left shoulder, 10 years old; valued at \$35.

MARE—By same, one buck (the color is written thus) mare, both hind feet white, star in forehead, Spanish brands, 8 years old; valued at \$35.

Harvey County—John C. Johnston, clerk.

HORSE—Taken up by Henry Rearick, of Newton tp., June 14, 1885, one light bay horse, about 15 hands high, age unknown, badly knee-sprung in both knees, bunches on both hind legs similar to spavin, a little white on the nose, had a halter on with the shank tied up; valued at \$40.

Ford county—S. Gallagher, Jr., clerk.

HORSE—Taken up by L. B. Huttman, of Spearville tp., June 13, 1885, one bay horse, 4 years old, white hind legs up to hock-joint; valued at \$75.

HORSE—By same, one black horse, 15 years old, small white spot on left side of neck, near shoulder; valued at \$40.

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Beauty of Tone, Elegance of Finish,

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Nervous Debility Lost Manhood Weakness and Decay
A favorite prescription of a noted specialist (now re-issued). Druggists can fill it. Address
DR. WARD & CO., LOUISIANA, MO.

There is a good deal of trouble among the principal railroads of the Eastern States. They are reaching out into the territory heretofore occupied by rival lines, and this arouses a spirit of retaliation which is doing nobody any good. The outcome would be the building of more roads and cheapening of railway service if the new roads can be maintained. But that is doubtful. Railroad property is decreasing in value very fast. Most of the roads are not earning any profits, and some of them are running at a loss. It may be that the proposed war will result in gain to the people, but we rather expect that it will force a consolidation among roads that are now natural competitors, and thus injure the people's interests. We believe it would be better if all the railroad were consolidated and put under control of good and equitable laws. But it will not do to put it into the hands of private individuals.

The *National Live Stock Journal*, of Chicago, is of opinion that the short wheat crop is a blessing in disguise. It says the short crop of wheat this year, and accounts from all quarters show that it will be exceptionally short, should not after all be regarded with so much apprehension. First, let it be remembered, that 60 bushels of wheat at \$1 amount to as much net money as 100 bushels at 60 cents; hence the difference in cash value in the crop will not be as great as might generally be supposed. Again, the importance of the wheat crop is greatly overrated. This arises partly from the fact that it is a commodity which furnishes the material for so much speculation; that for every bushel of wheat grown several hundred are bought and sold. Another point worth emphasizing is, that wheat is not a good crop for the country; it is a drain on the land, sold off the farm in its crude form, and rarely yielding the producer a satisfactory income. Discouragement in its growth will doubtless have good results in leading many persons to change their systems of agriculture; it will suggest to them the value and importance of live stock, and induce many to abandon this continual wheat-growing for grass-raising. For those who happen to have foolishly and unfortunately put most of their faith in wheat this year, the blessing will seem so much disguised as to be unrecognizable, but it will be there all the same.

When the spoilsman reads that the meek are blessed, "for they shall inherit the earth," he generally remarks that that is just what the meek are after.

Hart Pioneer Nurseries,

[Established, Dade Co., Mo., 1857; Ft. Scott, Kas., 1865; Incorporated, 1884.]

FORT SCOTT, : KANSAS.

A full line of Nursery stock, all warranted true to name. No substitution of varieties to our purchasers. Reference: Bank of Ft. Scott. For other testimonials see our catalogue.

RIVER VIEW Stock Farm.

50 HEAD OF

IMPORTED NORMAN STALLIONS

Just arrived from France, added to my stock of Norman Horses, which now numbers upwards of 100 HEAD, from 2 to 5 years old. Parties wishing to purchase first-class stock will do well to call and see my Normans before purchasing elsewhere. Prices and terms to suit purchasers. All of the above stallions were selected by myself in France this season. (Mention this paper.)

JAMES A. PERRY

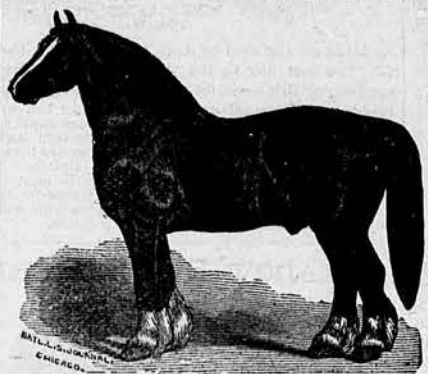
Importer and Breeder of Norman Horses,

River View Stock Farm, Wilmington, Ill.

Fifty miles south of Chicago, on the Chicago & Alton railroad.

OVER ONE HUNDRED CLYDESDALE, ENGLISH DRAFT AND PERCHERON NORMAN

Stallions and Mares arrived in August, '84.



Another importation just received, ages range from two to four years old. Our stock won fifteen premiums at the Iowa State Fair of 1884; also sweepstakes on Clydesdale stallions and sweepstakes on Percheron-Norman stallions. 300 High-Grade Mares, in foal to our most noted horses, for sale.

Advantages offered to customers at our ranch: Many years' experience in importing and breeding. Immense collections, variety of breeds, enabling comparison of merits. The best of everything. A world-wide reputation for fair and honorable dealings. Close proximity to all the through railroad lines. Low prices consequent to the extent of the business. Low rates of transportation and general facilities. Visitors welcome at our establishment.

Ranch 2 miles west of Keota, Keokuk Co., Iowa, on the C. R. I. & P. R. R.; 15 miles west of Washington, Ia. SINGMASTER & SONS, Keota, Keokuk Co., Iowa.

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BREEDERS OF

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Our herd numbers 130 head of well-bred Short-horns, comprising Cruickshanks, Rose of Sharons, Young Marys, Arabellas, Woodhill Duchesses, Lavinias, Floras, Desdemonas, Lady Janes and other good families. The well-known Cruickshank bull BARMPTON'S PRIDE 49854 and the Bates bull ARCHIE HAMILTON 49792 serve our herd. We make a specialty of milking Short-horns, the Arabellas being specially noted as milkers. Good, useful animals of both sexes always for sale.

Premium Berkshires very cheap.

Pioneer Herd of Holstein Cattle

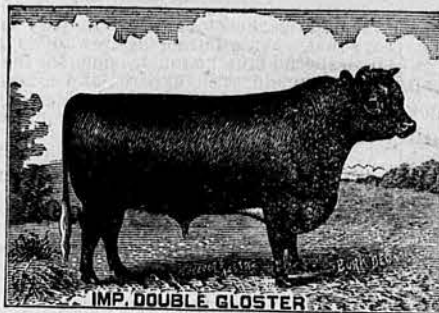
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For beef, butter, and cheese, breed HOLSTEINS. For largest return on money invested in swine, breed DUCROC JERSEYS. Choice registered animals for sale by WM. A. GARDNER, Oregon, Mo. Correspondence solicited. When writing mention this paper.

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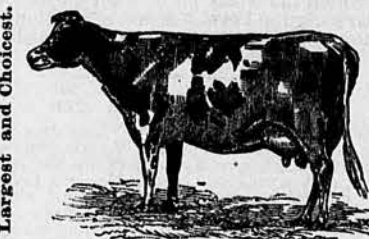
"DOG VAIL"

Such as Cruickshanks, Roses of Sharons, Young Marys, Phyllises, Josephines, and other good sorts. Also

Roadster, Draft & General-Purpose Horses, Mares & Mules.

Stock always in fine condition and for sale at reasonable prices. Correspondence and inspection invited. Call at the Blue Valley Bank, Manhattan, Kansas.

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Every animal selected by a member of the herd in person.

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550 Head on Hand.

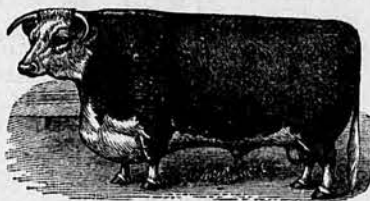
Over thirty yearly records made in this herd average 14,212 lbs. 5 ozs.; average age of cows four-and-a-half years. In 1881 our entire herd of mature cows averaged 14,164 lbs. 15 ozs. In 1882 our entire herd of eight three year-olds averaged 12,388 lbs. 9 ozs. April 1, 1884, ten cows in this herd had made records from 14,000 to 18,000 lbs. each, averaging 15,608 lbs. 6 3-10 ozs. For the year ending June, 1884, five mature cows averaged 15,621 lbs. 1 2-5 ozs. Seven heifers of the Netherland Family, five of them two years old and two three years old, averaged 11,556 lbs. 1 2-5 ozs.

BUTTER RECORDS.

Nine cows averaged 17 lbs. 5 1-2 ozs. per week. Eight heifers, three years old, averaged 13 lbs. 4 3-4 ozs. per week. Eleven heifers, two years old and younger, averaged 10 lbs. 3 ozs. per week. The entire original imported Netherland Family of six cows (two being but three years old) averaged 17 lbs. 6 1 6 ozs. per week. When writing always mention the KANSAS FARMER.

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Important information for the breeders and stockmen west and southwest of the Missouri river! 60 acclimated imported

Hereford Bulls for Sale!

They represent blood of Horace, Lord Wilton, The Grove 3d, and other prize-winning sires. Thirty 18 months to 2 years; thirty 14 to 18 months old. Selected from best herds in England. Recorded in A. H. R. or eligible and entered for record in Vol. V. Illustrated Catalogues.

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OTTAWA HERD OF

Poland-China and Duroc Jersey Red Hogs.



I. L. WHIPPLE, Prop'r, Ottawa, Kas.

I have for sale a fine lot of young pigs sired by Jayhawker 2639, Ottawa King 2885 (the champion hogs of Franklin county), and Buckeye Boy 2d 2219, Ben Butler 2977, Leek's Gilt-Edge 2887, which are very fine breeders of fashionable strains. My sows are all first-class and of popular strains. I also have an extra fine lot of Duroc Jersey Red pigs for sale from sires and dams that have never been beaten in the show ring in four counties in Kansas. I have hogs of all ages in pairs or trio, of no kin, for sale. Herd has taken over twenty prizes this last year. My herd has never had any disease. Stock all eligible or recorded in Central Record. Please call and see stock, or write and give description of what you want. Inquiries promptly answered. Farm, three miles southeast of Ottawa, Kas.

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FOR WIRE FENCES

Preserves fences from damage and live stock and persons from being killed by lightning.

Agents wanted.

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IT WILL BE AN ADVANTAGE to always mention the KANSAS FARMER when writing to advertisers.

The Veterinarian.

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

TO PREVENT FLY-BLOW.—What would you recommend as a dressing to prevent flies from tormenting the sheep on the heads? Also, when the maggot blows, what is the best lotion to kill them and heal the wound? [To prevent the fly annoying, make a plaster of pitch and beeswax, or thick tar, and smear each sheep's head with it when the maggots blow; remove all wool from the part, and dress with—turpentine, one part; olive oil, three parts; or spirit of tar alone.]

QUIDDING.—One of my horses is losing flesh very rapidly, and I am anxious to know the reason. He is ten years old, and seems in good health. When feeding he spits out some of his food instead of swallowing it, and he frequently has a pellet of semi-masticated food in his mouth. He has been doing so for fully a month. At first I thought he had a sore throat, but I now think there is some other cause. [Your horse has become what is termed a "quidder." Quidding is due to some affection of the teeth or injury to the inside of the cheeks. The most common cause is, one or two teeth grow so long and sharp that the animal is unable to retain a grasp of the food. Sometimes it is due to a diseased tooth, which requires to be extracted. The mouth must be examined by a skilled person, and the teeth rasped or otherwise treated.]

INFLAMMATION OF UDDER.—I lost a valuable sow the other day, five days after giving birth to ten pigs. I first noticed her ill the third day; she was very dull; had entirely lost her appetite; did not notice her pigs; bowels constipated, and udder hard and very hot. The young pigs could get very little milk and soon died. Before and after farrowing, I fed the sow on barley meal, potatoes and milk, allowing her as much as she could eat. I have two other sows due to farrow in about a fortnight. Can you tell me what was wrong with my sow, and how to prevent the others taking the same disease? [The sow had inflammation of the udder, due to too high feeding. It is advisable to give all animals that are about to have young a lighter diet for three or four days before and after parturition. If your other two sows are in very high condition, reduce by half their food for several days prior to farrowing. If the udders become inflamed it will be necessary to rub them frequently with camphorated oil.]

KIDNEY COMPLAINT IN HOGS.—Weakness of the hind-quarters in swine is of no infrequent occurrence, and is generally ascribed to some trouble with the kidneys. If the cause of the weakness was similar in all cases, the question of prevention or cure might be readily stated. But the condition may be due to one or more of a variety of evils. It is frequently ascribed to the presence of worms in the kidneys, but such is seldom the case. More frequently it is due to rheumatism, scrofula, malnutrition or other disease of the bony structure, etc.; a paraplegic state of the hind-quarters may also be due to reflex irritation, consequent upon the presence of large number of worms in the intestinal canal, coupled with constipation. Rheumatism of the loins, or lumbago, frequently affecting swine, is evidenced by pain, stiffness and difficulty in using the hind-quarters. The evil may also be due to trichinosis, sprain or other external injury of the loins or back. It will thus be understood that no one certain remedy can be satisfactorily applied to remove or cure in all cases, where the question of a remedy is asked for supposed kidney complaint, when perhaps in nine such cases out of ten, neither kidneys nor loins are at all at fault.

On small farms where a few pigs are kept, it will be found advantageous to plant a number of pumpkin seeds in the corn rows after the corn has been worked. A large, cheap crop may be thus secured, and the pigs will grow faster on a mixed vegetable diet.

Rats and mice are particularly averse to tar, and benzine vapor is speedily fatal to them. Broken glass, mixed with tar, will effectually stop their holes, and a small quantity of benzine poured into their burrows quickly dislodges them in a state of seeming intoxication.

The *Poultry World* advises that duck eggs be set under hens, as the latter make better mothers and will find more food for the ducklings. But this should only be done when the ducklings are to be raised for market, and not for breeding purposes.

The Massachusetts *Ploughman* very truly says that when a farmer desires to go into some special crop he must remember that he must compete with experts, and unless he can also become an expert he should not enter upon what will prove an unequal contest.

Wild animals have killed a great many cattle in Montana of late years, and the bounty law cost the Montana Treasury \$12,000, paid for scalps, during the year 1884. There were killed during the year 547 bears, 143 mountain lions, 540 wolves and 1,621 coyotes.

When a chief dies in Sitka his wives pass to his next heir, and, unless these relicts purchase their freedom with blankets, they are united to their grandson or nephew as a matter of course. High-strung young Siwash sometimes scorn these legacies, and then there is war, all the widows resenting such an outrage on decency and established etiquette. It is said, however, that henpecking is too small a word to describe the way in which the wives bully their lords. Woman's rights have reached a development among the Sitkans that would astonish the woman suffrage leaders.

Nervous Debilitated Men

You are allowed a free trial of thirty days of the use of Dr. Dye's Celebrated Voltaic Belt with Electric Suspensory Appliances, for the speedy relief and permanent cure of Nervous Debility, loss of Vitality and Manhood, and all kindred troubles. Also, for many other diseases. Complete restoration to health, vigor and manhood guaranteed. No risk is incurred. Illustrated pamphlet, with full information, terms, etc., mailed free by addressing Voltaic Belt Co., Marshall, Mich.

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G. M. EMERICK, M. D., Brookville, Ill. 18 Holstein-Friesian Bulls, 100 Victoria Pigs for sale at living rates; now is the time to procure choice stock. 30 varieties of Fancy Poultry. Write for what you want. JAMES FAGER, Manager.

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Bred to our crack
Boars;

If you want
A YOUNG BOAR
Pig;

If you want
A YOUNG SOW
Pig;

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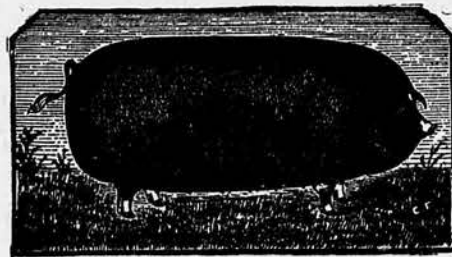
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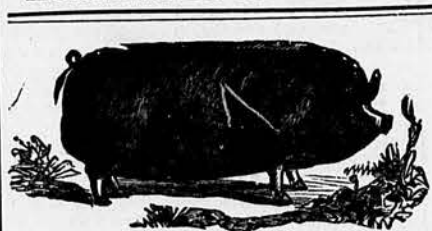
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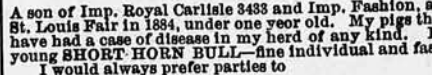
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Established in 1868.



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A son of Imp. Royal Carlisle 3433 and Imp. Fashion, and Duke of Wellington 12092, winner of second prize at St. Louis Fair in 1884, under one year old. My pigs this spring are very fine, from five different boars. I never have had a case of disease in my herd of any kind. Have some choice Boars now ready for service, also one young SHORT-HORN BULL—fine individual and fashionably bred. I would always prefer parties to

Come and See My Stock Before Purchasing,
But orders trusted to me will receive my own personal attention and will be filled with care, for I will not send out stock that I would be ashamed to keep myself. Catalogues will be ready soon. Correspondence solicited. Come and see or address
JAMES ELLIOTT, Abilene, Kansas.

THOROUGHbred POLAND-CHINAS



As produced and bred by A. C. MOORE & SONS, Canton, Ill. The best hog in the world. We have made a specialty of this breed for 38 years. We are the largest breeders of thoroughbred Poland-Chinas in the world. Shipped over 700 pigs in 1883 and could not supply the demand. We are raising 1,000 pigs for this season's trade. We have 150 sows and 10 males we are breeding from. Our breeders are all recorded in American P.-C. Record. Pigs all eligible to record. Photo card of 43 breeders free. *Swine Journal* 25 cts. in 2-cent stamps. Come and see our stock; if not as represented we will pay your expenses. Special rates by express.

MEADOW BROOK HERD
OF POLAND-CHINA SWINE.
Breeding Stock recorded in American and Ohio Records. Tom Duffield 1875 A. P.-C. R., at head of herd. Always space with latest improvements of the favorite breed. Personal inspection solicited. Correspondence promptly answered.
JELLEY & FILLEY, Proprietors,
KINGMAN, KANSAS.

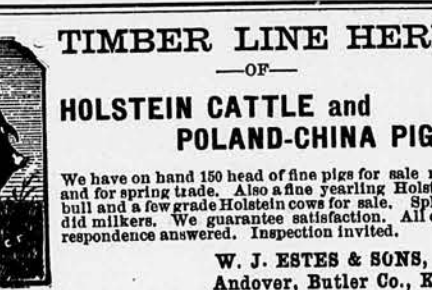


RANKIN BALDRIDGE,
Parsons, Kansas,
Breeder of Pure Poland-China Hogs. This herd is remarkable for purity, symmetry, and are good breeders. Black Jim, a prize-winner, bred by B. F. Dorsey, heads the herd. Stock recorded in Central Poland-China Record.
Correspondence invited.



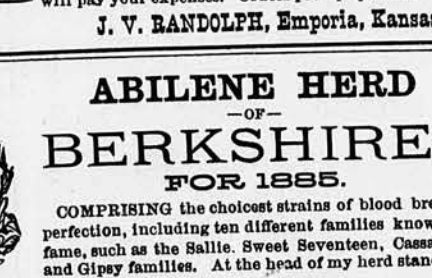
S. V. WALTON & SON,
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—Breeder of—
IMPROVED POLAND-CHINA HOGS
Of the Highest Type.
All well pedigreed. Correspondence solicited

TIMBER LINE HERD
—OF—
HOLSTEIN CATTLE and
POLAND-CHINA PIGS.
We have on hand 150 head of fine pigs for sale now and for spring trade. Also a fine yearling Holstein bull and a few grade Holstein cows for sale. Splendid milkers. We guarantee satisfaction. All correspondence answered. Inspection invited.
W. J. ESTES & SONS,
Andover, Butler Co., Kas.



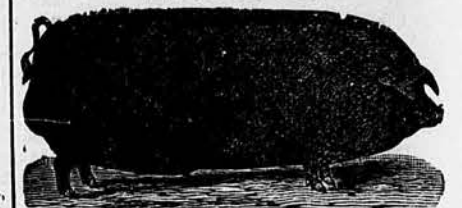
RIVERSIDE HERDS
POLAND and BERKSHIRE SWINE.
Having been a breeder of Poland China Swine in Kansas for seventeen years, it is with pride as well as pleasure that I announce to the people of the New West that I am offering the finest lot of Pigs that I have ever seen offered, representing the best strains of the breed, and thoroughbred. I will sell orders of either sex and any age at reasonable figures. All stock warranted to give satisfaction. Come and see my stock or write, and if not as represented, I will pay your expenses. Orders promptly filled.
J. V. RANDOLPH, Emporia, Kansas.

ABILENE HERD
—OF—
BERKSHIRES
FOR 1885.
COMPRISING the choicest strains of blood bred to perfection, including ten different families known to fame, such as the Sallie, Sweet Seventeen, Cassanara and Gipsy families. At the head of my herd stands



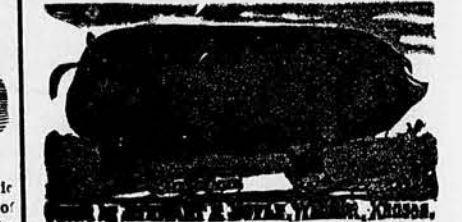
Send stamp for Circular and Price List.
Chester White, Berkshire and Poland-China Pigs, fine Setter Dogs, Scotch Collies, Fox Hounds and Beagles, Sheep and Poultry, bred and for sale by W. GIBSON & Co., West Chester, Chester Co., Pa.

Poland-China and Berkshire HOGS.

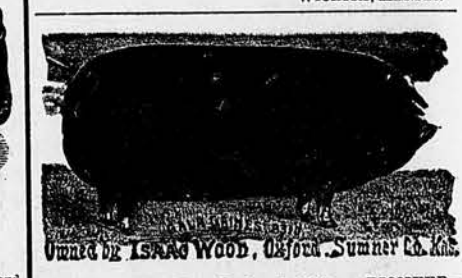


We have for sale a fine lot of Poland-China and Berkshire Pigs, from 2 to 6 months old. Ours is the largest herd of pure-bred swine in the State, and the very best strains of blood of each breed. If you want any of our stock write us and describe what you want. We have been in the business many years, and have sold many hogs in this and in other States, and with universal satisfaction to our patrons. Our hogs are fine in form and style, of large stock, quick growth, good bone, hardy and of wonderful vitality. Our Poland-Chinas are recorded in the American Poland-China Record.
RANDOLPH & RANDOLPH,
EMPORIA, LYON CO., KANSAS.

Acme Herd of Poland-Chinas



We are having a splendid lot of pigs for this season's trade, sired by "Challenge 4939" and "Kentucky King 2661." Orders taken now. Pedigrees full-edge and stock first-class. We claim that our "Challenge 4939" is the best boar in Kansas. "For money, marbles or chalk."
STEWART & BOYLE,
WICHITA, KANSAS.



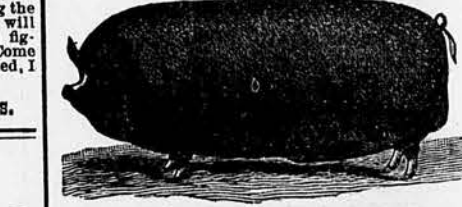
ISAAC WOOD, Oxford, Kas.—PIONEER—
The sweetestest herd of the Southwest for three consecutive years. Comprising the blood of all the popular strains of the day. Six years a specialty. Pigs furnished not of kin. Quality of stock and pedigree first-class. Prices low, and favorable rates by express to all points. Pigs of different ages ready to ship, and orders taken for future delivery. Satisfaction guaranteed. For history of herd, see Vol. IV, page 31; Vol. V, page 47, and Vol. VI, page 37, Ohio P.-C. Record.

PLEASANT VALLEY HERD
—OF—
Pure-bred Berkshire Swine.

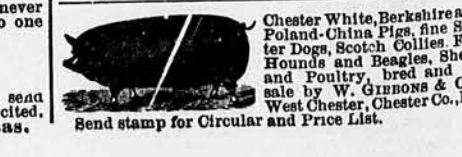


I have thirty breeding sows, all matured animals and of the very best strains of blood. I am using three splendid imported boars, headed by the splendid prize-winner Plantagenet 2919, winner of five first prizes and gold medal at the leading shows in Canada in 1881. I am now prepared to fill orders for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

PURE-BRED
Berkshire and Small Yorkshire
SWINE.



We are breeding 25 of the best selected sows of the above named swine to be found in the country, direct descendants from Imported Sires and Dams. We are prepared to fill orders for either breed, of both sexes, at the very lowest prices.
We have tried Small Yorkshires thoroughly, and are satisfied that they cannot be excelled as profitable hog to raise. They are very docile and mature rapidly. Send for prices and catalogue to
WM. BOOTH & SON,
Winchester, Jefferson Co., Kas.



Beet Sugar Making.

As a pointer showing how the wind is blowing, we copy the report of an interview with a Washington Territory man named Meeker, who went to Germany to investigate the beet sugar industry there and returned to go into the business in his own locality. During the conversation Mr. Meeker said:

"You, of course, are aware that a joint stock company has been formed for the purpose of manufacturing sugar from beets in this county and that our articles of incorporation have been filed in the Auditor's office and also with the Secretary of the Territory. On the 16th inst. a meeting of the Trustees of the Valley Sugar Company was held at Kent. T. M. Alvord was elected President; M. J. Meeker, Vice President; C. M. Davis, Secretary; P. Saar, Treasurer, and myself, Manager. I was instructed to proceed at once to canvass among the farmers and contract for 25,000 tons of beets per annum for five years, the price fixed on being \$4.50 per ton. Already 8,000 tons per annum have been promised. Measures have already been taken to secure a site for a factory opposite Alvord's place on White river, so that freight can be taken to and from the factory either by the river route or by rail. The size of the works contemplated is sufficient to turn out 40,000 pounds of sugar per day, and the furnaces will consume fully 10,000 tons of coal per annum. There is no danger of overstocking the market with sugar, as you will see when I tell you that nearly 10,000 tons of the article are consumed on the Pacific slope each year. I recently visited Germany for the purpose of investigating the beet sugar industry there, and to ascertain by comparison if it would be practical to inaugurate the industry on Puget sound. I found that sugar was there being produced from beets as cheaply as it is in any of the cane-producing regions in the world. Over half the sugar consumed in the world to-day is manufactured from beets. From years of study and research, and a large outlay of money in traveling and investigating the subject, I am convinced that we can manufacture sugar here as cheaply as they do in Germany, and consequently can compete with any sugar cane-producing region on the continent. In California the manufacture of sugar from beets is being made a success. One factory in Alvarado has been running for five years successfully, and making money for its projectors. The factory consumes Seattle coal, for which it has to pay from \$4.50 to \$5 per ton; while the same class of coal (screenings) could be landed at our factory in train-load lots at \$2.50 per ton, which would make a saving to us over the California factory of \$25,000 per annum in the item of fuel alone. This Puget sound country is admirably adapted to the production of sugar beets. Mr. Alvord has for five years raised sugar beets with an average yield of twenty tons per acre. I raised sixty-five tons last year on two acres of land on my White river farm. The average in Germany is from eleven to thirteen tons per acre. All the valley land on the Sound is well adapted to the raising of sugar beets.

The Syracuse Standard calls attention to special farming in New York, and alludes particularly to hop growing, saying that the ten or twenty acres of hops usually grown on the average farm all the rest of the farm is made to contribute. A certain number of cows are kept for the fertilization of the hop yard and the rest of the farm left to take its chances of the maintenance of its productive qualities. Western corn and ground feed are bought in quantity for feeding purposes, and thus the live stock is maintained with scanty provisions of pasture and hay from the farm. The product of the dairy is milk, butter and cheese, usually not sufficient to meet the expenses of the household, as large numbers of hired hands are maintained, and in the picking season the whole hop region is literally overrun with *canaille* of the cities, who achieve the triple purpose of replenishing their pockets, filling their stomachs and putting better blood into their veins. The proprietor emerges from the scurry with a crop that he wants to sell, fearing low prices, and fears to sell lest later he might get more. So he goes through the winter on the ragged edge of doubt until spring, when at the urgent request of his banker or merchant he

puts his crop in the market at the lowest price, and makes up the balance of his dues with a mortgage on his farm, hurries to reset his poles, and begins a repetition of his former experience.



FOR CLEANSING THE SKIN and Scalp of Birth Humors, for allaying Itching, Burning and Inflammation, for curing the first symptoms of Eczema, Psoriasis, Milk Crust, Scall-Head, Scrofula, and other inherited skin and blood diseases, CUTICURA, the great Skin Cure, and CUTICURA SOAP, an exquisite Skin Beautifier, externally, and CUTICURA RESOLVENT, the new Blood Purifier, internally, are infallible. Absolutely pure. Sold everywhere. Price, CUTICURA, 50c.; SOAP, 25c.; RESOLVENT, \$1. POTTER DRUG AND CHEMICAL CO., BOSTON, MASS.

Send for "How to Cure Skin Diseases."

TILE and BRICK MACHINERY.
STONE-SEPARATING
CLAY-CRUSHERS
Illustrated Catalogue free.
H. BREWER & CO.,
No. 146 Mill St.,
TECUMSEH, MICH.

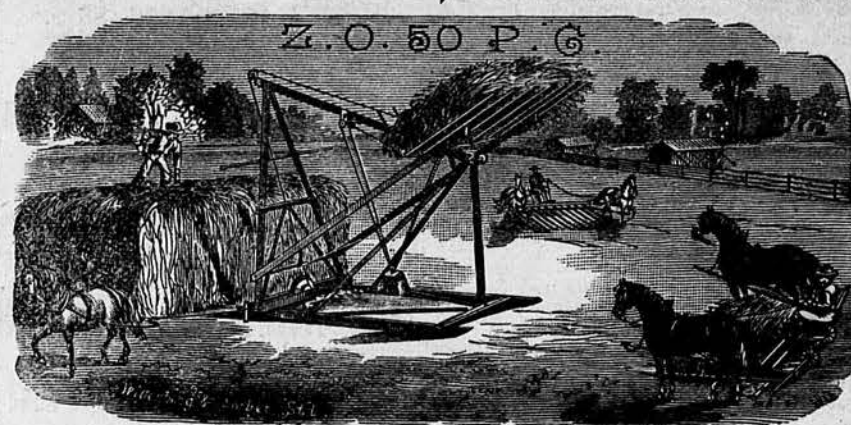
ARTESIAN WELLS
Rock Drilling, Well Digging, Pipe Driving,
Prospecting Machines and Outfits.
GENERAL WELL SUPPLIES
MANUFACTURED BY
NEEDHAM & RUPP,
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ILLUSTRATED CATALOGUE MAILED FREE.

ZIMMERMAN
FRUIT & VEGETABLE
EVAPORATOR
Made of Galvanized Iron. 5 SIZES.
16,000 SOLD. Economical, Durable
and Fire Proof. Will pay for
itself in 30 days use, out of sale of
its own products.
FREE! Our Illustrated Catalogue
and Treatise.
Address **ZIMMERMAN MFG CO.,**
BURLINGTON, IOWA.
AGENTS WANTED.

TIMKEN SPRING VEHICLES.
OVER 400,000 IN USE.
Easiest Riding Vehicle made. Rides as easy
with one person as two. The Springs lengthen
and shorten according to the weight they carry. Equally
well adapted to rough country roads and
fine drives of cities. Manufactured and sold by
all leading Carriage Builders and Dealers.

Sedgwick STEEL WIRE Fence
Is the best general purpose wire fence in use.
It is a **strong net-work without barbs.**
Don't injure stock. It will turn dogs, pigs, sheep,
and poultry, as well as horses and cattle. The
best fence for Farms, Gardens, Stock ranges, and
Railroads. Very neat, pretty styles for Lawns,
Parks, School-lots, and Cemeteries. Covered with
rust-proof paint, or made of galvanized wire, as
preferred. It will last a life-time. It is better
than boards or barbed wire in every respect.
Give it a fair trial; it will wear itself into favor.
The Sedgwick Gates made of wrought iron
pipe and steel wire, defy all competition in light-
ness, neatness, strength, and durability. We
make the best, cheapest, and easiest working
all-iron automatic or self-opening gate, and
the neatest cheap iron fences now
made. The **Best to-Hang poultry coup** is a
late and useful invention. The **Best Wire**
Stretcher, Cutting Piers, and Post Aug-
ers. We also manufacture Russell's excel-
lent **Wind Engines** for pumping, and Geared
Engines for grinding etc. For prices and particulars
ask Hardware Dealers, or address, men's paper,
SEDGWICK BROS., Richmond, Ind.

"ACME" HAY RICKER, LOADER and RAKES.



AGENTS WANTED!

The Greatest Money-saving, Labor-saving, Time-saving Hay Machinery Ever Invented.

Twenty to forty acres of Hay put up in one day, at a saving of from 50 to 75 per cent. The hay is not touched with fork until on the rick in splendid shape for stacker. They make the farmer perfectly independent, even with a large crop of hay on hand, at a time when it is difficult to get reliable help, at great expense.

THE ACME RICKER is always ready for work, eats nothing, never strikes for higher wages and is not subject to sunstroke. It builds Ricks or Stacks 20 to 25 feet high, and elevates from 300 to 1,000 pounds at one time. It is also the best and most complete Hay-loader on the market. These statements verified by thousands of the best farmers in the land. Write for Catalogue giving full particulars.

ACME HAY HARVESTER CO., Manufacturers, Peoria, Illinois.

MOLINE PLOW CO., Kansas City, Mo.,
GENERAL AGENTS FOR KANSAS AND WESTERN MISSOURI.

TOLL YOUR OWN CRIST!!
"MANVEL" WIND ENGINE
SIMPLE, DURABLE, SELF-REGULATING, NOISELESS.
STOCKMEN AND FARMERS CAN
HARNESS THE WIND
AND GRIND ALL THEIR GRAIN with a machine without a cog, friction clutch, or ratchet, and at the same time Pumps all their water for Stock. **FULL LINE OF PUMPS, TANKS, IRON PIPES & FITTINGS** kept on hand. Parties requiring a Wind Mill should examine this machine, built for service, and write, stating the kind and amount of work they want done, to

B. S. WILLIAMS & CO., (Limited), Atchison, Kas.
(FACTORY, KALAMAZOO, MICHIGAN.)

STROWBRIDGE SOWER
BROAD CAST
Sows all grains, grass seeds, plaster, salt, ashes, commercial fertilizers - everything requiring broadcasting - any quantity per acre, better and faster than any other method. **SAVES SEED** by sowing perfectly even. Not affected by wind, as seed is not thrown upwards. **Sows half or full cast**, on either or both sides of wagon. Readily attached to any wagon or cart without injury, and used wherever they can be driven. **Lasts a life-time.** Sows 80 acres wheat per day. **Crop one-fourth larger** than when drilled. **Only perfect Broadcaster** made; most accurate agricultural implement in the world. Endorsed and recommended by Agricultural colleges and best farmers in U. S. Fully warranted - perfectly simple. **Do not be put off with any other.** Send at once for new free illustrated catalogue with full information and hundreds of testimonials.
BEST. CHEAPEST. SIMPLEST.
C. W. DORR, Manager
RACINE SEEDER COMPANY, 262 FOURTH ST., DES MOINES, IOWA.

ADAMS WIND MILLS
— ARE BACKED BY A —
SPLENDID TWELVE YEARS RECORD
TIME-TRIED. STORM-TESTED.
(ALSO)
READY MADE WIND MILL TOWERS,
SQUARE, OR ROUND WATER-TANKS, IRON-PUMPS,
BRASS PUMP-CYLINDERS, &c.
Pamphlets, Circulars and Testimonial Sheets, Mailed Free.
MARSEILLES M'F'G CO., Marseilles, La Salle Co., Ill., U.S.A.

ALTHOUSE
VANELESS WINDMILLS, pumping and geared, are taking the LEAD wherever known.
OVER 10,000 IN USE.
Wooden and Iron Pumps equal to the best. Catalogues free.
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Ritchie's Safety Attachment
FOR HORNED ANIMALS,
Or Bull Conqueror.
Pat. April 8, 1884. Entire Patent or Territory for sale. \$5 and \$5.50 per set. Sent to any part of U. S. on receipt of price. Circular and testimonials sent on application. Enclose stamp for reply. Address **Geo. W. Ritchie,** Arrowsmith, Illinois.

TOWER'S FISH BRAND SLICKER The Best Waterproof Coat.
The FISH BRAND SLICKER is warranted waterproof, and will keep you dry in the hardest storm. The new POMMEL SLICKER is a perfect riding coat, and covers the entire saddle. Beware of imitations. None genuine without the "Fish Brand" trade-mark. Illustrated Catalogue free. A. J. Tower, Boston, Mass.

TWO-CENT COLUMN.

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

READ THIS.—Fancy-colored Rabbits for sale. Address Joe Shellabarger, 123 Harrison street, Topeka, Kas.

EXTRA BARGAINS.—Five extra Yearling Short-horn Bulls for sale cheap. L. A. Knapp, Dover, Kansas.

FOR SALE.—Twenty-five choice Yearling Heifers, 40 two-year-old Heifers, 25 three-year-old Heifers and 50 two-year-old Steers, at a bargain, at the Topeka Stock Yards, Topeka.

RARE BARGAINS.—Poland-China Boar, ready for service; young Sows, bred and unbred; all choice breeding, from registered stock—good ones. Will sell low on liberal terms. Satisfaction guaranteed. Pigs for sale. Shipped pigs to Illinois, Nebraska, Dakota and Kansas this season. Address Summit Park Farm, Globe, Douglas Co., Kas.

ELECTRIC CONDUCTOR FOR WIRE FENCES.—With a lateral collector on each wire and perpendicular conductor with ground attachment, it effectively protects wire fences, live stock and persons from being killed by lightning. It strengthens the fence, and avoids the necessity of using so many posts. Patented May 12, 1885. Agents wanted. Address Dr. Chas. Williamson, Washington, Kansas.

FINE BOARS FOR SALE.—Jayhawk 2639, Vol. V. C. R., two years old. He is a good breeder and a fine show hog. He received first prize over seven yearling hogs in Franklin county. Also a Duroc Jersey Red Boar—Kansas King 641, Duroc Jersey Record. He is a good breeder. Has never been beaten in the show ring in three counties. For further information inquire of I. L. Whipple, Ottawa, Kas.

FOR SALE!

Fifteen extra fine PEDIGREED SHORT-HORN BULLS for sale at reasonable prices. G. W. GLICK, Atchison, Kansas.

1,000,000 POUNDS

WOOL!
WANTED.

For which the highest market price will be paid in cash. Sacks furnished or exchanged, by applying to **GALE & WILBER,** (Postoffice Address) WINFIELD or ROCK, Cowley Co., KANSAS.

PLUM GROVE HERD OF
Premium Short-Horns!

AT PUBLIC SALE,
Wednesday and Thursday, July 29 and 30, '85.

The undersigned has determined to offer his entire herd of SHORT-HORN CATTLE at Public Sale, on the above date, at his place, two miles west of West Liberty, Iowa. The offering will comprise about 150 Head, including

23 HEAD OF PURE CRUICKSHANK CATTLE, ALL HIS FINE SHOW CATTLE, And the choice breeding Cows which he has secured by years of careful selection. None of the animals will be sold at private sale, and every one catalogued will be in the sale unless out of condition at that time. Catalogues now ready. All letters concerning sale, catalogues, etc., should be directed to

JAMES MORGAN, West Liberty, Iowa.
Col. J. W. JUDY, Auctioneer. ROBERT MILLER.

EXTENSIVE SALE
Well-bred Short-horns!

A. H. LACKEY & SON
Will Sell on the
Fair Grounds, Peabody, Marion Co., Kansas,
ON THURSDAY, JULY 16TH, 1885,

75 HEAD OF GOOD SHORT-HORN COWS, HEIFERS AND YOUNG BULLS. The offerings comprise Rose of Sharons, Young Marys, Cruickshanks, Arabellas, Blossoms, and all sorts that are useful for the purposes for which Short-horns are bred—beef and milk. They are mostly young cows and heifers, and all old enough have calves or are in calf by the splendid English bull Imported Grand Duke of Barrington 3d (4644) or the prize Cruickshank bull Barmington's Pride 49854, or the pure Princess bull Blythedale Prince 42931, or others as good as any in the State of Kansas. Every animal, except young calves, is recorded. Every animal offered and receiving a bid will be sold.

TERMS:—Twelve months credit on good, bankable notes at 10 per cent. interest. Three per cent. off for cash. **PEABODY** is on the Atchison, Topeka & Santa Fe R. R., fifty-five miles west of Emporia. Three trains each way daily.
Col. S. A. SAWYER, Auctioneer. A. H. LACKEY & SON, Peabody, Kas., June 20, 1885.

KANSAS FARMERS' MUTUAL
FIRE INSURANCE CO.,

—OF—
ABILENE, : KANSAS.

OFFICERS:
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INSURES
Farm Property and Live Stock

AGAINST
Fire, Lightning, Tornadoes and Wind
STORMS.

The Company has now complied with the law enacted by the last Legislature for Mutual Fire Insurance Companies to create a guarantee capital and now do business on a cash basis.

AGENTS WANTED in Every County in Kansas.

For any information, address the Secretary, Abilene, Kansas.



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MEDICAL
—AND—
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INSTITUTE.

PERMANENT AND RELIABLE.

DRS. MULVANE, MUNK & MULVANE,
Physicians and Surgeons in charge.

Treat successfully all curable diseases of the eye and ear. Also catarrh of the nose, throat and lungs, by new and sure methods.

All Manner of Chronic, Private and Surgical Diseases Successfully and Scientifically Treated.

Patients Treated at Home,
BY CORRESPONDENCE.

Send for circular and printed list of questions. Correspondence and consultation strictly confidential.

DRS. MULVANE, MUNK & MULVANE,
86 east Sixth street, Topeka, Kansas.

THIS PAPER may be found on file at Geo. P. Rowell & Co.'s Newspaper Advertising Bureau (10 Spruce street), where advertising contracts may be made for it IN NEW YORK.

The AULTMAN & TAYLOR
THRESHING MACHINERY!

PATENTED BY AN AULTMAN & TAYLOR SEPARATOR



The Most Reliable in the Market! The Most Durable in the Market! No other Separator will Thresh the Grain as Clean None other will Save as Much Grain for the Farmer!

It is called the "Starved Rooster Thresher" because it puts the grain in the half bushel instead of the straw-stack, and leaves none in the straw-stack for chickens to fatten on as is the case with other Threshers.

Owners of Aultman & Taylor Threshers make more money than the owners of any other Machines: Because they can always have the preference of jobs; because they can obtain better prices for their work; because they can thresh grain in all conditions, when other machines cannot; they have less expenses, less detentions, less breakages, for the machinery is durable and strong.

In the case of steam rigs, farmers feel safer in employing an Aultman & Taylor Engine than any other, for they are built strong, and are safe; they do not wish to employ new and untried Engines; they want the "old reliable" Aultman & Taylor, that has stood the test for years.

Threshermen, See the New Improvements for 1885!

On Separator and Engine, which places this machinery still further in advance of all competitors. The light-running, double-gear Aultman & Taylor Horse Power is also kept ahead. The durability of this Machinery (as well as its good work) is the most wonderful of any Threshing Machinery ever made. Amongst the many instances of durability, would refer our customers to M. A. & W. W. Wisecarver, of Keighley, Butler county, Kas., to whom we last fall sold a new Separator to replace an old Aultman & Taylor Separator that was bought fourteen years ago and has been run every season since!

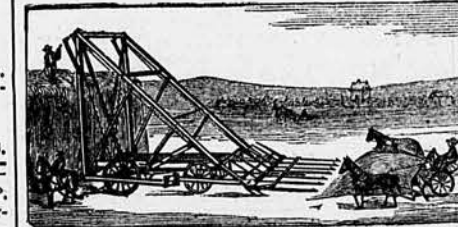
We can refer to a number of parties who bought Aultman & Taylor Machines when we first came to Kansas City, twelve or thirteen years ago, and are still running them. Can any other machines show such a record? No. Is not the Aultman & Taylor the cheapest to buy, even at 50 per cent. more money than other Machines? Yes, but they can be bought at same price as other so-called first-class Machines. Are not the greatest gains in Threshing Machines in this country to be had in the Aultman & Taylor? Yes.

Call on our Agents for Descriptive Pamphlets, Price Lists, etc., giving the liberal terms offered on this Machinery, or send to us direct.

TRUMBULL, REYNOLDS & ALLEN,
General Western Agents, KANSAS CITY, MO.

THE DAIN IMPROVED AUTOMATIC HAY-STACKER and GATHERERS!

The Greatest Labor-saving, Money-saving, Time-saving Machinery Ever Introduced on the Farm or Ranch.



Will save 50 to 75 per cent. in the cost of putting up hay over the old way. Does away with the hard labor of putting up hay; hay not touched with a fork from the time it leaves the mower until it is on the stack; is put up better than it can be done by hand, so that hay keeps better and is worth more. The cost of a Stacker and two Gatherers saved in putting up every seventy tons of hay! No farmer or ranchman who puts up hay can afford to be without it. Makes a farmer independent. One man, three boys and five horses will do the work of ten men and six horses. Send for Descriptive Circulars and Price Lists.

TRUMBULL, REYNOLDS & ALLEN,
(Manufacturers) Kansas City, Mo.

Vehicles for All Kansas and the Southwest!

BRADLEY, WHEELER & CO.,

Manufacturers' Direct Distributing House for



OUR JUMP SEAT.

BUGGIES OF EVERY STYLE AND GRADE.

Concord Buggies, Buckboards, etc. Garden City Plows and Cultivators, Bradley Mowers and Rakes. All goods sold under our own name and guarantee! Catalogues and full information promptly furnished. Inquiries or visits solicited from every body.

CORNER 10th AND HICKORY STS., (Near Union Depot on route to Stock Yards),

KANSAS CITY

Goodwin Park Stock Farm,
BELOIT, : : : KANSAS.

ABERDEEN-ANGUS CATTLE!

A few tip-top YOUNG BULLS, at low figures and on easy terms. We offer a few CHOICE FEMALES from our show herd, for sale for the first time.

Two well-bred SHORT-HORN COWS at a bargain. Two standard-bred

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