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THE KANSAS FARMER.

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Communications.

NAOME, Mitchell Co., November 12.—Farmers in this community are very busy husking corn; though many are done. The crop proved to be a very poor one with us. Where chintz bugs were the worst, the yield was, in some instances, not over ten bushels per acre. Where they were favored with showers of rain, as along the river, the crop is heavy. We now have an excellent prospect for fall wheat. The first few days of the month were quite cold and winterish. Cabbages and turnips that were not gathered were somewhat injured; but it moderated down, and the 8th was rainy, the 10th very foggy all day. That night, the next morning, and last night, it rained a great deal, so that the ground is real wet. It has cleared off pleasant, and will give wheat a good start if it holds warm for a few days. Early sown wheat generally looks very well. Some pieces were injured by the bugs. Much sown in the last three weeks has not all grown; it has been so dry. Sowing and plowing is still progressing. About the middle of October wheat ran up to one dollar for a few days, but has fallen again to 60 and 80 cents. Corn sells readily at 25 cents; sweet potatoes, \$1.20 per bushel; Irish potatoes, 70 cents; butter, 20 cents; eggs, 14 cents per dozen. Fat hogs are down again to \$2.65 per 100 pounds. Many farmers are selling off close, in order to have corn enough to feed till next crop. Fruit tree business was very lively to-day at Glen Elder. Agents from two nurseries were very busy delivering trees to farmers. Standard apples were sold at 12½ cents each, but shrubs generally are very high. Of what brother farmer can I get seed of the Catalpa? Is the Ailanthus a good tree for Kansas? F. W. BAKER.

We presume the Ailanthus would grow well in Kansas. We have never known it to refuse growing when given the slightest opportunity, and it has the reputation of keeping all insects at a distance from it. The Ailanthus is the very skink of forest trees, and we advise all who may venture to plant it, to plant on the north of their dwellings and at as great a distance as possible from them, for if the villainous odor of the flowers is wafted to the house, it is likely to make the family sick. If they escape sickness, infliction of the horrible stench is enough to make the family desert the premises for two weeks, or about the first of June, when the tree is in bloom. The tree is a rapid grower, and the wood is said to make fence posts of great durability.

GILLES CREEK, Russell Co., Nov. 17.—The cold, bleak winds, with rain and sleet, remind one that winter is upon us. But few farmers in this section of the county are prepared as yet to meet it. Corn, as a general thing, still stands in the fields for causes better known to the sowers than to observers.

Owing to the extra mild, dry weather, the amount of winter wheat sown was rather small, and the prospects are not very flattering for an abundant harvest for 1880. It is feared that a large per cent. of the wheat sown was so nearly dried up, that the rains of last week will do it no good. Had it continued warm for a few weeks we could have made some estimate of the damage. We undoubtedly will have to rely upon spring crops for our next harvest.

The chinch-bug injured spring wheat to a considerable extent, and farmers were quite unanimous in the belief that it was policy to abandon it altogether, but should winter wheat prove a failure, spring wheat will have to be resorted to as a necessity.

In the last issue of the FARMER appeared an article headed "Timber Culture," which concerns a number of farmers in this vicinity. For their interest as well as my own, I would ask if the law regulating timber culture does not give the right to enter a quarter section of any government land as a timber claim? If so, does a few scattering trees on one-half section debar one from taking a timber claim on the other half where there are no trees?

It is rumored here that the bondholders of the Kansas Pacific lands have taken, or are about to take them out of the hands of the railroad company. If such is the case what effect will it have on the lands already sold? If some one of the many readers of the FARMER will enlighten us, we will be glad to have them do so. H. E. BOOMHOWER.

The government land agent in your district

will give the desired information respecting special timber claims. The hypothetical bond question is one for the courts, which no one can answer with any degree of assurance that the opinion would prove to be the legal one.—[Ed.]

COPE, Jackson Co., Nov. 22.—I believe in my last I promised to give some account of the sheep husbandry of South Jackson. Until within the last three years there were very few sheep in our county, especially in the south part of the county, but at the present there are many very fine flocks, viz.: Mr. Allison 1600, Mr. Carpenter 4000, Mr. Skinner 700, Mr. Warden 600, Shary Bros. 600, Wyatt & Reardon 1040. This section of our county seems well adapted to the raising of sheep as the present flocks seem healthy and doing well. In fact stock of all kinds does well and returns a better profit to the farmer than the raising of grain for market. The vast amount of "Speculator's lands" lying in every direction on all sides gives fine and abundant range for stock, and fine natural meadows to secure hay for winter, and as this is the case stock raising will be king in South Jackson.

The heavy rains of the 8th and 11th insts. replenished the fountains that were almost dried up and secures abundant stock water for the winter, besides leaving the ground in fine condition for the winter wheat. Wheat never looked more promising at this time of year and goes into winter quarters in fine condition.

I have a pear tree in bloom at the present writing which shows that the warm spell of October has caused the fruit buds to develop rather much for the coming winter I fear.

Stock of all kinds in this section is in fine condition. J. W. WILLIAMS.

AUBURN, Shawnee Co., Nov. 19.—The indication here for a good wheat crop are first rate. The corn crop will probably average forty-five bushels to the acre. And the natural consequence is, that the farmers are exhilarated.

Last week I paid a visit to J. P. Trowe's farm, situated two and a half miles north east of Auburn, on six mile creek. Mr. Trowe has just returned from Illinois, bringing with him 280 head of thoroughbred Merino breeding ewes and 40 thoroughbred Merino rams, these with his main flock consisting of 600 head of good grade Merino ewes and wethers and 62 head of thoroughbred Merino rams, probably gives him the lead amongst the breeders of fine wool sheep in Kansas, in quality if not in quantity. What experience I have had, and what I have gleaned from the experience of others, leads me to believe that the Merino does much better in Kansas than the coarse wool or Cotswold. The Cotswold is much more subject to the scours than the Merino, and is much less able to stand the cold rains to which they are often exposed in the fall and spring, no matter how vigilant and careful the shepherd may be. Showers are likely to come up very suddenly and find him perhaps a mile or more from his fold, and five cases out of ten the Cotswold will either die or catch a bad cold, while the Merino would go through it all right, not that I mean to say that the Merino should be exposed to such weather when it is possible to avoid it. No matter how hardy a sheep may be too much of a risk should not be run.

There is one thing I have noticed in Kansas farmers, and that is their carelessness in regard to the implements, out buildings, &c. Their implements are permitted to stand out exposed to the weather all winter and the consequence is that they last just about half as long as they ought to. Farmers, generally speaking, seem to select the lowest spot on the farm for stable, and the stable is generally a shed with the natural earth for floor, consequently in wet weather it is a mud hole which a good enterprising farmer would not allow his hogs to live in. In such cases a good drain can be constructed with very little trouble. Bore a hole in each stall with a post auger, about three feet deep, and fill it with small stones up to within about 6 inches of the top and fill up with dirt. I know of drains of this kind which have been in use for the last three years with perfect success. R. S. B.

CONWAY, Sumner Co., Nov. 17.—The weather at present is all that could be desired. Crops this year were very poor. I think wheat will not average more than half a crop, some pieces not being cut at all, principle cause, drought. Corn did well in the fore part of the season, there was a large acreage planted and got a good stand but dry weather and chinch bugs cut it short however, there is good corn on the bottoms. There is more wheat sowed here this fall than ever before, that sowed in early plowing looks very well. Late plowing not so good. I prefer drilling to broad casting, especially on old ground. Stock of all kinds in good condi-

tion, not many fat hogs, owing to scarcity of corn. There is a splendid opening for a mill here on Slate creek. I think a mill could be run most of the year, there being none nearer than twenty miles.

THOS. DALY.

WAKEFIELD, Clay Co., Nov. 20.—Are you ready? For what, say you? Well, first for winter. How many over-worked wives and mothers after a hard day's labor, are sitting up, far into the night to make and repair the warm stockings and mittens that the coming cold will render necessary and for want of which colds are contracted, sickness ensue, and perhaps weeks of valuable time are lost, and worse than lost, for the trains of evil that follow are too long to enumerate here. Nor is the suffering in the household alone, horses and colts, cows and calves and pigs are shivering the night through and often all day, while the cold snap lasts, bringing disaster and death to them and consequently loss to the owner.

Poor as some of us are in Kansas, we work harder and waste more treasure in our improvidence than a proper preparation for winter cost us. What is the remedy for all this? To commence, I will say, before the winter clothing and bedding is put away in the spring, mend, cut down and baste, if there is not time to make, and when the garments are needed, they can be put together in the time it would take to hunt up pieces and patterns. In the fall mend and make over, wash and iron summer clothes before packing away, then when warm spring days come, dresses and clothes are ready for Father and the children; even though Mothers and the older girls are deep in the mysteries of house cleaning.

Sell enough of your stock to make shelter for the rest, depend upon it you will have as many in the spring as though you tried without proper housing and protection to winter those animals depending upon us for comfort and life; and those that you do winter will be worth more money.

Did you buy glass jars at no slight expense for tomatoes and fruits that your family might have a varied and healthful supply? See that the house is so well banked up that the cellar cannot freeze, else jars may be broken, fruits lost, and the winter supply of vegetables destroyed.

Above and more than all, are you permanently situated where you are? Do I not hear you speak of this and that improvement as intended to benefit your children? proving conclusively that you only expect to remain where you are a few years? While arranging for them, are you making preparations for yourself that you may begin creditably to yourself in the country that is to be your future home. To wait until you move is not wise. Are you acquainting yourself with the ways of the people, the requirements of the statutes of the country, are you in communication with any one in authority there? Have you a house ready for occupancy? (John 14:2) Is your wardrobe in order? (Rev. 7:9,10) Have you the where-withal for your journey? (1st. Peter 1:18) Are you ready?

LETHE.

CAMDEN, Morris Co., Nov. 21.—The farmers in this community are in good spirits just now, and why should we not be in good spirits. The fall wheat in Morris county never looked better for the time of year. Lots of it stand half a foot high, and thick enough to bring 40 to 60 bushels per acre next harvest if the season proves favorable. By the looks of things Morris county will send more bushels of wheat to market in 1880 than she ever sent in one year since it has been organized, if no serious drawbacks take place. The heavy fall of rain in the early part of November has given the wheat a good set for winter and not much is to be feared.

Produce is on the rise; wheat 90 cents to \$1.00; corn 23c; oats and potatoes are almost out of the question. Some of the larger farmers are still holding on to their wheat. Farmers don't hold too long for fear the bottom drops out of prices. When wheat is bringing \$1.00 or more we would advise farmers to let it slide, for fear of a drop in prices or a loss by fire. When we look at the accounts of the millions of bushels in store in New York, Chicago, St. Louis, and Kansas City, and millions more in smaller towns and in the hands of farmers we can't hope for prices much above \$1.00 per bushel. I think it will go above this mark more than once, but not stand, as heavy rushes are bound to break the market, and I would not be surprised to see farmers selling their wheat next May for a less price than they will get for it in December and January.

Immigrants are still coming, and yet there is

room for hundreds more. Come to Morris county if you want to secure for yourselves and families fine farms and free homes.

J. L. SHORE.

POMONA, Franklin Co., Nov. 24.—All agricultural interests in this county seem in a prosperous way. Seventy-five per cent. of the corn is cribbed in good shape. Farmers busy gathering the rest. Feeders are paying 20c a bushel. Hay is abundant and cheap. Stock in good condition and wheat ditto. Fat hogs are in limited supply and sell for 3c a lb. Weather fine. F. D. COBURN.

CEDAR POINT, Chase Co., Nov. 22.—Please correct the errors of your compositor in my letter of November 8th in regard to rainfall. In giving quantity I always give inches and tenths, and write it in decimal form; the decimal point at the left of the figure denoting tenths and not inches; thus my first statement should read "In all .6 (6 tenths) inches has fallen, etc." And again "July 8th, we had 2.1 inches," which is made to read 21 inches! I can well imagine the look of surprise from every intelligent reader at such a record. I doubt if such a shower has been recorded since a navigator by the name of Noah took the contract for a large job of irrigation some years ago. Also for five inches October 10th, please read .5 (5 tenths) inches—as my letter stands in print, instead of being a dry season it would be the wettest one ever recorded. Your correspondent from Woodson county enquires how to cultivate the currant. If he will examine the record of the State Horticultural Society for the past five or six years he will see from the reports from various parts of the state that the climate of Kansas is too hot and dry for the natural habit of the currant, and that it is only raised with much pains and care; the best method being to plant on the north side of a stone wall or picket fence, with the ground well mulched. Some have claimed a success by planting in the shade of fruit trees, but the labor and care is so great and the result so uncertain (in this region at least) that I have given up growing them entirely.

I have noticed once or twice remarks about fall wheat jointing in the fall; allow me to ask the question, will wheat joint in the fall? I have heard this objection raised to early sowing, and have seen farmers worry themselves a great deal for fear of it, and yet in an experience of nearly fifty years in farming, I have never yet seen a stalk of fall jointed wheat.

I do not know much from practical experience here in Kansas, and as this much south of my native state, and the season very different; it may joint here, but this I know, that in northern Illinois some twenty-five years ago I received a package of wheat from the department of agriculture marked "spring wheat," and governed by the name I sowed it in the spring. It grew all summer, and in the fall was in the same condition that wheat ordinarily is when ready to joint, though much larger, but there was no jointing nor any preparation for it. It died during the winter, and an examination of the plants in the spring showed that the roots had formed a hard woody center, with an outside bark, such as wheat has when preparing to ripen; but it never made any attempt to joint. I have had wheat sown in the eastern part of this state in the middle of August, that grew very large and rank, and made a very poor crop the next season, as though it had expended too much vitality in the fall, but it never made an attempt to joint; so that until I have some better evidence than my past observation, I shall question the fact of such a result.

J. M. BYRAM.

KINGMAN, Kingman Co., Nov. 20.—We are having plenty of rain now and the wheat crop is in splendid condition. Business is quite lively now and people begin to look and act as if they were again on the verge of prosperity. Corn is now selling for 25 cents; wheat 80 cents, butter 20 cents; eggs 15 cents, and other things in proportion. Stock is in good condition. The county is becoming well settled, and with a fine class of people generally. The town of Kingman is growing quite fast and will probably be one of the finest little towns of the southwest. We now have two newspapers, the *Mercury* and the *Citizen*, two schools, and nearly all of the religious denominations are represented. We also have four grocery stores, one drug store and one dry good store; two restaurants, one bakery and two meat markets; two blacksmith shops, two feed stables, (the third will be finished in a few days.) The emigration to this part is large. JUNO.

Bees.

HOW TO CARE FOR A FIRST COLONY.
If it comes by express or freight, from a deal-

er or bee-raiser—take it home carefully in a spring wagon. Be sure that the combs run lengthwise of the wagon; drive slowly, and handle with care. Place the hive in the position you wish it to occupy, and let it remain till evening, when the wire cloth that is usually nailed over the entrance may be removed, and the same board or other obstacle placed in front of the hive, so that when the bees come out in the morning they will circle around and mark the location, before going to their work, and thus return in due time with safety. About midday it may be well to open the hive and see whether any combs are broken down, and if so, get them straightened up, and fastened either with twine or wire, until the bees have secured them, when such fastenings should be removed. Be sure to smoke them well before opening the hive.

BEES MARKING THEIR LOCATION.

This is done through the sense of sight. A large percentage of the bees that fly out in the early spring are those that have come into being during the winter and early spring; consequently they do not leave the hive in a straight line, but only go a few inches, then turn their heads towards the hive and oscillate back and forth in front of it; then moving further back, still hovering in front of the hive, with their heads towards the entrance, occasionally advancing towards it, as if to note more particularly the place of entrance and its immediate surroundings, they then increase the distance, taking a survey of buildings, trees, fences, or other noticeable objects near by, after which they return to the hive, and start in a direct line from it. On returning, they come directly to the hive and enter; the surrounding objects and color of the hive are all noted by the bees.—Thomas G. Newman.

Raspberries.

I have grown a dozen or more varieties of Black Cap raspberries, of all, so far, the Doolittle has paid best in 1872. I paid three cents per quart for picking 687 quarts of Doolittle grown on a piece of land five rods by six and one-half, or two rods less than one-fifth of an acre. I have two varieties, the Golden Thoeules, Golden Color, and the Guaggia. This last variety, when ripe, is of a dark purple color. For two years they have proved to be very hardy and productive. The last named has been bearing about six weeks, and each variety has produced berries measuring one inch in diameter at the base, and in quality the very best, selling at five cents per quart more than all others. I think these varieties will beat the Doolittle. I am growing all the plants I can, and when I get one-fifth or one-fourth acre, then you will hear from me again.

OF RED RASPBERRIES

I have grown six varieties, and discarded all except the Turner's Red—this variety I planted in the spring of 1875; paid \$2 for twenty plants; set one row five rods long, kept them free from weeds the first summer, then let them have their own way, and care for themselves. Now I have a patch twenty feet wide by five rods long. The past season we picked from 60 to 80 quarts of this the best berry we ever grew. This berry is in bearing fully six weeks. I expect this slovenly way of growing berries will be sneered at, but let them come, I am satisfied with the result and have no objection to others beating me. I have sold the above berries for 30 cents per pint. HERMITAGE.

Farmers look out for your pocket books. The following paragraph is on its travels. Pretty soon some seed man or agent may be expected round offering the wonderful product of South America for sale. Probably the genius who invented the egg hoax got this corn yarn up.

CUZCO CORN.

A firm in San Francisco has recently received a consignment of a new variety of corn from Peru, South America, which is thus described, by the San Francisco Merchant: "The Cuzco corn is as large as a butter bean, has a thin white skin, and is all flour or meal. It is as wonderful in quality as it is in size, resembling a well-baked cracker, and being two or three times larger than our 'large yellow' variety. When simply boiled, the grain breaks into the finest, largest and whitest hominy ever seen, and this without grinding or crushing. It is said by corn experts to be admirably adapted for the manufacture of whisky and also of starch, and very valuable in its green state for fodder. It will also form, as green corn, a new vegetable for the table. The weight of Cuzco corn is 43 to 44 pounds to the bushel. The average of several weighings was 26 to 27 grains to the ounce, while a sample of 'large yellow' gave 75 grains to the ounce."

Farm Stock.

The Steers of the Future.

Under this caption a writer in the *Country Gentleman* has the following speculations on the future cattle of some parts of the western states. "The astonishing increase of the milk breeds in Illinois is having a rather demoralizing effect on those of our farmers largely engaged in buying and fattening cattle. It has been their practice formerly to scour the country in their immediate neighborhoods, and pick up every year, and generally in the autumn months, the surplus young stock—calves and yearlings—of their less favored neighbors, and since the common stock of the country had more or less short-horn blood, it was not a difficult thing to get together a bunch of steers which would turn off 1400 to 1500 each at ages past three years. But if the milk breeds go on increasing, the difficulty of such successful enterprises will be increased, and feeders will have to content themselves with the rough and bony steer of Jersey, Ayrshire and Holstein parentage, or go to breeding Short-Horns themselves. And this may be the result in the end, and perhaps the most profitable one for the best feeders in the long run, since Mr. Gillette, the most successful breeder and feeder in the state, from the view of profitable beef production, a long time since found it impossible to obtain from others the right kind of material for making first-class beef-yielding and well-ripened cattle, and was compelled to go down to first principles and have every calf, raised and stall-fed and fattened by him, dropped on his premises. Feeders generally are coming to regard the Herefords with so much favor, that in the course of three or four years they may become a conspicuous feature in the leading cattle markets, but the aversion to steers of the milk breed ancestry amounts to something like a passion, which time will lessen, if it does not destroy. In this connection it may be interesting to inquire whether the Jersey, Ayrshire and Holstein, brought from cool and moist climates where they have been bred and fed for centuries on a special diet for a special purpose, will long continue to show the same milk-producing characteristics and gaunt and bony frames under a climate widely unlike, and when fed upon a diet radically and essentially different. The answer is, they will be likely to slowly accommodate themselves to their surroundings, and that the milk breed steer of 1885 or 1890 will differ as much and nearly in the same way, from his brother of to-day, as the Short-Horn grade differs from the steer of common cattle ancestry. However strong the dairy breeds may become in the corn and cattle counties, the beef races will always be stronger, and from whatever race spring the steers the product of these regions will always have a good reputation as beefers."

Cattle Shows as Mediums for Advertising.

It has been claimed by many farmers, of late, that our cattle shows have been changed from their original purpose, the improvement of agriculture, to mere holidays, or simply first-rate mediums for advertising manufactured articles. If an inventor, manufacturer or dealer wished to bring his wares to the notice of the public, he has found the cattle show or agricultural fair, one of the very best places for showing his goods, and it matters not whether the goods are agricultural implements or the most common utensils of the household. The people all go to the fairs, and so every conceivable article from a threshing machine to a cake of shaving soap, finds a place within the enclosure. At some of the local exhibitions it has seemed that village merchants have vied with each other in the displays of their stock in trade, till one would imagine that their old places of business had been permanently abandoned for the new quarters upon the fair ground. Several enterprising firms of our acquaintance have made it a point to spend some hundreds of dollars annually in showing their goods at our cattle shows. Whole carloads of manufactured articles are shipped to fair grounds, and perhaps reshipped from week to week to new points, accompanied by regular salesmen, who explain merits, distribute circulars and perhaps take large orders for goods among the visitors present. And why should not the cattle show be a good place to advertise not only agricultural implements, but even the corn salve and bread yeast? The farmers and everybody else are expected to be met here, and the newspapers are supposed to notice with a free puff, all the exhibits, however insignificant or commonplace they may be. We have no doubt that many manufacturers and dealers have, during the past two months, received benefits through newspaper reports of fairs which, if paid for at regular advertising rates, would have amounted to a sum that would astonish them; and yet we make no complaint, for most of these dealers are also liberal advertisers in the regular way. We allude to the matter now, because we find complaints coming up from the exhibitors' side. We have for a long while heard complaints from the farmers, that the fairs are deteriorating and becoming corrupt; that the trotting horse and the race course have ruined our agricultural societies; and that the better part of the community are staying away from these annual gatherings. But now the complaint comes up that, even for advertising purposes, the fairs are becoming a failure; that the people gathered at these modern exhibitions do not come to look at ploughs, harrows, mowing machines, or rakes, but to see the fast horses on the race course.

One of our large Boston dealers in farming utensils, after spending a considerable sum in freighting an assortment of his valuable wares to one of our oldest and formerly best agricultural societies' grounds, and keeping two or three men in attendance during the several days of the fair, came away not a little discouraged, if not disgusted. The first day was called the "farmers' day," and there were some farmers there who were glad to see the new tools, but like all "first days," it was a day of preparation, of getting ready for business, rather than for doing business. The other days were given up almost entirely to the norsemen, the track and its accompaniments being about all there was left of the fair. The cattle, the swine, and the poultry were taken home, and generally the farmers had gone too, so the men who had gone the length of the state, and had engaged rooms at the hotels for the week, had the satisfaction of sitting alone and deserted among their wares in Agricultural Hall, while the crowd was watching and waiting to see the horses "go." Now, if it has come to this, that not only the practical working farmers, but the merchants and manufacturers are finding that it "don't pay" to attend the fairs and exhibit their goods, what may we expect the future of these exhibitions will be? Is it possible that our agricultural societies, which are aided by state bounty, are to become mere organs for getting up amusements for the people? If so, let us change their name.—N. E. Farmer.

Hygiene of the Horse's Eye.

For any one proposing to raise horses, the selection of a suitable climate is therefore of the very first importance, not alone on account of the eyes, but of the whole bodily stamina; for the failure of the eyes is but an indication of the general loss of vigor, toughness, and endurance. A location which would be quite suitable for the propagation of cattle, sheep, pigs, and other animals for the butcher, will often fail to produce the better class of horses. The reason is simply this, that damp climate which favors enlargement and reproduction of cells, a loose texture of the body, and a tendency to the deposition of fat, is ill calculated to produce fine, closely-textured bone, firmness and resistance of the soft textures, and extraordinary powers of endurance. *Stabling.*—The same result follows the use of close, damp stables, in which there are present all the above-mentioned relaxing conditions, together with the irritating ammoniacal emanations from decomposing dung and urine, and the stored-up organic emanations from the lungs and skin preserved in the wood-work and other solids of the building.

Where horses, and above all where breeding and young horses are stabled, the greatest attention should be given to secure room—1,000 to 1,500 cubic feet for each animal—a free ventilation by capacious inlets near the floor and eaves, well-drained soil, naturally porous, if this can be secured, and a perfect drainage for the urine.

Racks.—These should not be above the level of the animal's head, so that dust and hay seeds may not fall into the eyes. If the hay is supplied from the floor above, it should be passed through a closely-boarded funnel, from which it will escape below the level of the eyes.

Light.—Stables should be moderately well-lighted, but we should avoid throwing the direct rays of the sun on the horse's eyes from in front. If too dark, the eyes become habituated to this, and in the absence of the customary stimulus of light, become less able to bear it; and when suddenly taken into the glare of sunshine, and especially of sunshine reflected from the winter's snow, they are liable to suffer from irritation and inflammation. If, on the other hand, the light falls directly on the horse's eyes from a window in front, the constant glare may of itself injure the eyes. In the one case, we have the condition of horses in mines, where the darkness and inevitably accompanying damp lead to an extensive prevalence of blindness; in the other we have that of the glass-blower or iron-puddler, whose bleared eyes betray his occupation. The light should be abundant, but should fall from windows placed behind or to one side of the stables, and not in front.

Draughts of Cold Air.—A further objection to windows in front is, that if left open so as to allow a current of cold air to strike across the face, it will tend to produce irritation and inflammation of the eyes. Cold, chilling draughts falling on any part of the body are injurious, and are liable to induce disease, and even ophthalmia in a predisposed subject, but much more are they likely to do so if they strike directly on the face and eyes. In building, therefore, we should avoid such counter openings as will produce cross draughts on the animal, and, above all (when the eyes are a main consideration) on the face.

Dust, Smoke, etc.—The sensibility of the eye is such, that there is far greater suffering from the presence of a small grain of sand inside the eyelids than from a much larger object which is smooth on its surface. Hence the importance of avoiding dust and sand clouds, if we would preserve healthy eyes; and, above all, should this be watched in the case of breeding animals. To drive in a cloud of dust raised by another vehicle, to place on open cars on railroads, or to work on a threshing machine in the direct current of the cloud of dust, are examples of practice that are injurious and reprehensible. Smoke blowing on the eyes, from burning rubbish or any other source, may be a sufficient cause of ophthalmia in a predisposed subject; and, like blows on the eyes, irritation by unsuitable bridles, etc., should be carefully guarded against.—National Live-Stock Journal.

Poultry.

Rearing Turkeys.—(Continued.)

THE TURKEY-POULTRY PEN

is a necessity while the young ones are coming up from the shell to six weeks old. This is a very simple contrivance, such as has long been in use among our best turkey breeders in late years, and which has been found both practical and highly useful.

This pen is constructed by placing a board on edge, say, fifteen inches high, on three sides, oblong square, eight or ten feet by five. The rear end is occupied by an upright, slant-roofed box, three feet by five, boarded tight, with a few holes at the eaves for ventilating it, when closed up. Entrance to this coop is made inside the boarded pen, the front of which may have a latched or wired door, to be shut at night, for security against prowling vermin.

The height of boarding described will confine the poults until they are six or eight weeks old, and the mother will not leave this pen because her young ones are unable to mount the barrier. It is an excellent arrangement for the poults, and keeps them dry and comfortable when they most need to be free from the rains or dews and dampness of the grass or open fields.

Nothing is so pernicious, and to no cause can the mortality among turkey poults be assigned so directly, as their exposure to wet in their young days. This is what it is that frequently destroys them, and to the careless method too often adopted by the ordinary turkey-raiser, of allowing his flocks to run about loosely in the early-morning hours, may be attributed more than half of all the losses experienced in the early season of the year which are so commonly complained of.

Confine the poults to such a pen, strictly, during the first two months of their lives. Feed them upon such food as we have described. House them at night, out of the heavy dews, in the way we have now directed, and protect them from the sun as well, and you may succeed in rearing five-sixths of all the young turkeys you can get hatched, ordinarily, from April to June, annually.

AFTER TWO MONTHS OLD

the young ones may be set at liberty, and allowed to follow the roamings of the hen mother. It is well at first not to let them out too early in the morning—while the dew is upon the grass. This chilly wet is an enemy to the young birds always, and occasions cramps frequently when exposed to the dampness alluded to.

They will gather in the pastures and fields, during their daily wanderings, fully one-half of all the sustenance they need. Feed them in the morning before they start away, and at night they will eat heartily of the grain supper you provide. And all of them will "come home to roost" at evening. Accustom them to this daily good cheer at nightfall and they will always be on hand seasonably to partake of your hospitable bounty.

But if they fail to return at first, they should be brought home at night with as much regularity as the cows, and it should be the business of some one to count the broods, and see every bird on the poles. If this habit is formed early, it will require very little time to attend to them. They will come regularly for their feed at night, but after a time this will not be necessary. With a good range they will pick up insects enough to keep them in good thriving condition. Dry summers are most favorable for them. Insects, especially grasshoppers, abound, and they lose no time in foraging. From June to September they will in the main take care of themselves, and benefit the farm by the havoc they make among the insects.

They will "shoot the red" at about three months or less, and after this and their early moult (say at four months old) they will grow well, if fed well, and come to maturity in good season, profitably.

GROWING THE TURKEY.

After the poults pass the really critical period of their existence, at two or three months old, if they throw out the red upon their heads without getting ill, they are usually considered to have passed the serious crisis in their natural lives, and will at once go forward flourishingly thereafter, with average good treatment.

The great bulk of turkeys that are lost go under at about this period, which is much more dangerous than that of moulting. At both these changes, however, they must be looked after carefully, fed judiciously, and kept both dry and warm, for the time being.

To make them grow well the poults should be fed systematically, after old enough to be allowed free range, with all they need of nutritious, dry provender. Wet, swampy, sloppy masses of trash are of very little service in turkey feeding. And this kind of stuff engenders disease among the flock. The turkey is raised only for the food of human beings, and the flesh should consequently be untainted with offal or offensive matter, either in their feeding or fattening. The practice of most farmers who raise turkeys is not to feed at all after the young birds are six or eight weeks old. They are driven off to the pasture or woods early in the morning, and get their living where they can find it. Their chief food is grasshoppers and other insects, and they do the pastures and meadows a good service in keeping under these destructive creatures. This may be well enough where insects and mast are plenty. But upon many farms the range of woodlands is exceedingly limited, and the growth of the birds will not be satisfactory without feed from the corn-crib. They should come to the roost every night with full crops, and if, on examination, this is not found to be the case, they should be regularly fed, once a day at least. There is

no danger of fattening a young turkey on a good range in the first six months. With first-class stock full feed will make a difference of five pounds in weight at Thanksgiving.

In all cases it is better to allow them cooked rather than raw food, except the latter be in the shape of whole corn, or rather buckwheat, to which they are very partial—say for the evening meal. But while they are growing, let them have their exercise freely, and allow them full range in the woods and pastures about the farm.

Boiled potatoes, carrots and turnips—mixed with their morning meal-mush—is an excellent regular feed for them daily. They will thrive admirably upon this; and they will need to grow and build up from the outset, to be in prime condition to fatten quickly when put up for this latter purpose. If specially large birds are desired, they should have extra feed as early as September. All kinds of grain are good for them. A mash, given to them warm, is highly relished in the cool, autumn mornings.

Your flocks of young Bronze turkeys at six and seven months old will be a beautiful sight, and worth a good deal of money. The cocks ought to weigh from eighteen to twenty pounds, and the hens from twelve to fifteen. The butcher will hardly get them, and you will think them too handsome for the Thanksgiving table even, when your neighbors are willing to give two prices for them for breeding birds.

FATTENING TURKEYS.

If the poults have been properly fed and kept in good thrift from the beginning, as we have suggested, the fattening process is brief, easy, and healthily accomplished. It requires but three weeks of full feeding in such cases to bring the eight or nine-months-old turkey into its best condition for eating and its plumpest trim for the butcher.

Pen the birds half a dozen together, in a dry, earth-floored, open coop, where they can be kept quiet and cleanly for three weeks. Feed them with cooked corn meal and vegetables twice a day, allowing them all they will eat up, at a time. Mix this feed with milk (sweet or sour), if you have it upon the place to spare, and into each mess of feed mingle a little pulverized charcoal daily. This will be all they need, except the evening supply of whole corn and buckwheat, which latter is best, both for variety and because it digests slowly during the night. In less than a month's time, if they have done well during the summer and fall while at liberty, the turkey will then be at its best for the shambles.

Some contend that the best way is not to interfere with the freedom of the turkeys in the least while fattening, arguing that after they have enjoyed an unlimited freedom for months, they will fret and pine in prison, and grow poorer, rather than gain in weight.

This depends: If your flocks are quite tame, and, owing to the locality or previous treatment, are so thoroughly domesticated as to be inclined to stay near home and not indulge in long tramps "o'er hill and dale," and they are so situated as not to be disturbed by dogs, angry neighbors, or any other source of disquietude, it will not be worth while to pen them. But if their accustomed range is a long and a wide one, they will make their wonted rounds through habit and their instinctive love for traveling, and will in this way "run off" a part of the desired fattness. The endless sparring of the young males in their constant quarrels in autumn, when at liberty, also gives them gymnastics of too exhausting a nature to be consistent with the most rapid accumulation of the desired weight. If cooping for fattening is determined upon, a good way to guard against fretting and pining is to fasten the flock in a roomy stable or barn floor every night for awhile and then for a part of each day, by spells, until they become accustomed to deprivation of liberty, so that when kept constantly "caged, cribbed, confined," they won't mind it so much. *SLAUGHTERING AND DRESSING.*

In the preparation of turkeys for market, they should be carefully picked and handsomely dressed at slaughtering time, as well as put into good flesh previously. When ready to kill, they should be left in the pen without food for a full day. The plan for some public markets is to sever the heads from the necks and allow them to bleed to death while being hung or held up by the legs. Other tradesmen prefer (in other places) to have them bled by puncturing the jugular vein, leaving the head on the neck, at killing.

The bird should be hand-picked, immediately after bleeding. This can be accomplished while the body is warm, and there is not that danger of tearing the skin in removing the feathers that there is, if the flesh is permitted first to cool. They may be thus picked without resorting to the scalding process, and the flesh will be better flavored when thus scalded. The same may be said of all kinds of poultry and wild game birds.

But if you find plucking in this way too slow and tedious for your stock of patience, scalding may take place in the usual manner with which every one is familiar; but as the flesh of a seven-months or eight-months-old turkey is very tender, you must be sure and not have the water too hot, or let the bird be in too long, so that the skin will come off in patches with the feathers. No rule can be given for this, but the constant exercise of good judgment is all that is necessary.

Remove the intestines before sending to market. The crop is usually empty. Leave the gizzard in its place, and clear the bird entirely of its pin-feathers, when any show, if you wish your fowls to please the purchaser best.

Next, look out that your dressed turkeys do not freeze after killing, before you get them to

market. Frozen birds may answer to sell to "cheap customers," but they won't do for those who know the difference between good and poor poultry! Therefore, get them to market in prime order, ripely fattened, plump in form, cleanly in flesh and handsomely plucked.—Poultry World.

Horticulture.

Leaf-Galls on the Grape-Vine.

The Rev. S. Winchester, Adirondack, Ulster county, N. Y., sends "a grape-leaf, with a strange growth upon it, which, examined under a microscope, is found to contain insects. They seem to be confined, so far as known, to the Delaware vine; and are found on the end leaves." Information is desired concerning them. They are the galls of the Grape Phylloxera. Each gall contains a wingless mother-louse and her more or less wingless eggs, from which hatch young lice, which spread to other parts of the vine and form galls as their parent did. There are several generations of this gall-making form of Phylloxera vestatrix, which is but a temporary or transient form of that pernicious insect, occurring more abundant on the Clinton, but found also on almost every other variety of our American grape vines, both wild and cultivated. It appears very generally over the whole of the United States east of the Rocky Mountains, and even in Ontario. It may be very abundant one year and scarcely noticed the next; and while sometimes causing the destruction of all the leaves, does little injury to the vine in comparison with that effected by the more permanent root-inhabiting form, of which so much has been written in recent years.

This root-inhabiting form causes swellings upon the more fibrous roots, and goes through a regular and constant cycle of development, winged females being produced in late summer and autumn, by which the species may disperse over extended areas; sexual individuals also are produced, the female of which lays a solitary impregnated egg under the bark of the more permanent parts of the vine. The gall-inhabiting form exists only in the female sex, and descends to the roots at the end of the growing season. Its propagation is essentially similar to that of building in plants, and the succeeding generations may be looked upon as but continuations of the original stem-mother. The root-inhabiting form, while possessing the same power of bud-reproduction, likewise combines that of true sexual reproduction, so that it may be said to multiply both by bud and by seed. The comparison of the propagation of Phylloxera with that of a plant is quite permissible and really warranted from a physiological standpoint. The gall-making insect is much more often observed than the root-inhabiting form, though the latter is so exceedingly destructive compared with the former.—Prof. C. V. Riley.

The Apple-Leaf Crumpler.

In many orchards, after the trees have lost their leaves, there may be seen, attached to the twigs by silken threads, numerous unsightly bunches of brown, withered leaves, that remain throughout the winter unless removed by picking. If some of these bunches be examined, there will be found within, irregular tubular cases, each containing a reddish-brown larva, somewhat less than one-half an inch in length. This is the larva called by B. D. Walsh the rascal leaf-crumpler, and is the young of a small gray-brown moth known to the entomologist as *Acrobasis nubilus*. According to Professor Riley, this insect is more or less common throughout the western states, and is so numerous in many localities as to be quite injurious, especially in nurseries.

The larva hibernates in its case, which it previously attaches securely to the threads of silk. In the spring, the warmth that starts the insect awakens the insect to a sense of his hunger; and cutting the threads which fastened the case to the twig, it carries it along until a supply of food be found, when the case is again secured and the feeding resumed. The larva feeds chiefly at night, temporarily leaving the case for this purpose. It does not restrict itself to leaves alone, but destroys swelling buds and young fruit, and knows the tender bark upon young twigs. Its full growth is reached about the last of May; and, assuming the pupal form within the case which protected it as a larva, it is quiet for a short time, and in June appears as a perfect moth. The eggs of the moth are soon after deposited upon the leaves; and from these are hatched a brood of larvae which attain about one-third their full size before they are deprived of food by the fall of the leaves, and complete their transformations the following spring.

The increase of this insect is measurably checked by at least two parasites, a small fly resembling the house-fly, and a small four-winged fly of the ichneumon family. The former has grown so numerous in some localities as to greatly reduce the numbers of the leaf-crumpler.

The cases containing the destructive larvae are rendered conspicuous by the fall of the leaves in autumn; and, during the winter, the leaf bunches should be carefully collected, and, as suggested by Prof. Riley, thrown into the center of a meadow or other field, away from any fruit trees. Here the larvae will be unable to reach proper food, and will wander around a short distance and finally die from starvation while such of the parasites as are nearly grown will mature and escape, to assist the orchardist by infesting other larvae of the kind.—Prof. Popenoe, of Kansas State Ag. College, in *Industrialist*.

Supp

471
320 acres 39 miles from Topeka, 240 acres under cultivation, 300 rods stone wall, plenty water and timber and rock, this land is well divided into two splendid farms, plenty of range, joins land on front and rear. Price \$30 per acre. This is a bargain.

472
A $\frac{1}{4}$ section in Shawnee county, smooth prairie, all tillable land, 45 acres under cultivation, no fence but have posts there ready, young orchard, 14 miles southwest of Topeka between Auburn and Dover, Council Grove road runs through corner of farm, frame house 14x30, frame stable. Price \$1200, terms 1-2 cash, balance to suit purchaser.

473
400 acres in Davis county, 140 acres under cultivation, 80 acres fenced hog tight, frame house 1-1-2 story, 8 rooms, 2000 gal. water well, Kautz stable, good feed lot, 100 acres good timber, well watered Republican river, 1-1-2 miles from railroad station. Price \$6000. Terms 2-3 cash, balance on time, will sell cows, hogs and tools.

479
To trade for a farm on Little or Big Soldier creek, 100 acres, 1-1-2 mile from Oswego, fenced, 20 acres in pastures, good driving water, 40 acres under cultivation, some timber, 70 acres good plow land, good building stone, sand and limestone, splendid building spot on the place, also 16 lots in town, 100 acres, 1-1-2 story, 4 good rooms, good well and stable. Price \$5300.

480
160 acres of rolling prairie, 12 miles from Topeka, \$5 per acre.

485
300,000 acres of land at \$1.25 to \$3.25 per acre on long time, 75 per cent. discount on cash.

20,000 acres selected lands in different counties, \$3 to \$5 per acre, $\frac{1}{4}$ cash, balance on long time, 6 per cent. interest, or 20 per cent. less for cash.

160 acres near Hartford, Lyon county, to trade for city or country property near Topeka.

addition to the above we have 1000 acres of land at \$1.25 per acre.

200,000 acres at \$1.50 to \$2.75 per acre.

200,000 acres at \$1.25 to \$2.75 per acre.

Also have 500 acres of the best Kansas river bottom, near St. Mary's, for \$14 per acre. These are the best lands in the state.

397
90 acres 8 miles southwest of city, 35 acres under cultivation, one-half story frame house, four rooms, good cellar, good stone barn, covered, two good water wheels, well watered by creek, a very desirable place, \$3250, half cash, balance time to suit.

320
Here is where you get your nice cozy, 75 acre farm, 13 miles southwest from Topeka, 5 acres under cultivation, 1-1-2 story stone house with basement, stone stable, hay roof, good stone corral, fenced with stone, board and hedge, good orchard, apple, peach, cherry, grapes, peaches, gooseberries and raspberries, two wells and living spring, two miles from postoffice. Price \$1600, cash at that.

459
320 acre farm, 5 miles from Silver Lake, 200 acres valley, balance upland, 120 acres under cultivation. 150 acres fenced with Kelly Dair Wire, new two story frame house, 1000 dollar, 6 roomed all finished complete, 200 Kansas home. Large frame barn 24x40, with stone basement for 32 head of stock, good wagon house, 1300 bushel corn crib covered with shingles, large hog corral and covered, pens, hogs and farm implements all new, must be sold with the farm, 1 span mares, 1 span mules, harness and wagon. The entire outfit is bought for \$6500, cash no time. Biggest bargain in this country.

491
\$160 acre farm in Douglas county, 12 acres fenced with stone and hedge, 80 acres under cultivation, little rolling, all good timber, good barn house, 2-1-2 miles from near Mound Postoffice, will trade for small place near Topeka. Price \$2000.

496
40 acres bottom land, 15 miles from Silver Lake, 15 acres under cultivation, watered by the Kaw, 250 fruit trees bearing, no buildings. Price only 1000 dollars.

371
160 acres in Wilson county, 30 acres timber, 50 acres under cultivation, buildings valued at \$400, watered by spring branch, 14 miles from Chaumont. Price only 1200 dollars.

463
120 acres all under cultivation, 15 acres timber, never failing stock water, all under good rail stake and rider fence, three fields, good orchard, all kinds of fruit, 250 apple, 100 peach, 25 to 40 cherry trees, good stone slope, good stone palisade, good stone corral, 2000 bushel corn crib, very desirable, maple growth, walnut drive-way to the house, 25 miles southwest from Topeka, four miles southwest of Oskaloosa, at 3200 dollars. It is on the main road to Oskaloosa.

465
11 acres 15 miles north of North Topeka, on Soldier creek, fronts on Kansas Avenue. 295 rods front, west end bounded by soldier creek, ten acres under cultivation, one acre timber, 1000 bushel corn crib and one, 10x24, well with pump, fruit trees. Price only \$1800.

455
160 acre farm, improved, all under fence, good 5 room frame house, cellar, stable, orchard, plenty running water and good range.

100, \$1000. 100, \$1050. 100, \$1225. 100, \$1325. 100, \$1500. 100, \$1500. 100, \$950. All choice land, well watered, and some timber, very desirable, near railroad.

139
60 acres of prairie in Oage county, Kansas, at ten dollars per acre.

141
160 acres in Dover township, nice, smooth prairie, 14 miles southeast of Dover. Price \$5 per acre.

142
154 acres of land in Auburn township at \$5 per acre.

III.—OF THE YIELD OF THE TWELVE MONTHS,
JUNE 1, 1870, TO MAY 31, 1880.

Butter, pounds. Cheese, pounds. Milk sold,
gallons. Market gardens, acres, value prod-
ucts, dollars. Value of animals slaughtered,
dollars. Value of forest products, dollars.
Value of home manufactures, dollars.

[illegible]

THE KANSAS FARMER.

HUDSON & EWING, Editors and Proprietors
Topeka, Kansas.

SUPPLEMENT.

TOPEKA.

A word about the wonderful growth of Topeka, the metropolis of the Great West, capital, political, railroad, and commercial center of the much talked of Kansas—dwellings, business houses, government and state buildings have been going up like magic—no less than one thousand having been erected in the past two years—and yet the city is, houses, houses, give us something to live in. Increase in population the past five years 5,000, giving it a population of fully 13,000, 3,000 more than one year ago, all this without any excitement or special effort, natural growth—nothing speculative. Dwellings and business houses here being built from actual necessity. Trade and commerce have kept pace with the growth of county and city, half million dollars being used for state and government buildings. The A., T. & S. F. railroad are extending their works and now employ in their shops over 500 men. On every hand you see thrift and enterprise. Topeka to-day is the best opening in America for jobbing houses, for merchandise, hardware, dry goods, clothing, boots and shoes, notions, groceries, etc., etc.; to capitalists no better opening can be found for a first-class banking house with capital of one hundred thousand to half million dollars. Money will command 12 per cent, short time loans, with A. No. "1" security, city and country demand and require capital.

Shawnee, Pottawatomie, Jefferson, Jackson and Wabanc counties are decidedly the best farming and stock raising counties in Kansas—certainly the best watered, best grasses and farming lands, none superior in the United States, as hundreds of farmers and stock men can testify. Railroad facilities are superior to any other locality in the state. The experience Ross & McClintock have had in traveling over these lands, gives them superior advantages in locating parties wishing either grain or stock farms, from a forty acre ranch to a 100,000 acre farm. They have located one hundred and seven men on farms within fifteen miles of Topeka, and have room for hundreds more.

For the past three years no part of the United States has surpassed us in wheat growing. Corn has been simply immense, yielding from 40 to 75 bushels per acre; wheat ranging from 15 to 43 bushels per acre. This is no bombast or guess work, we have the evidence. Within the past three years it has been practically demonstrated that no better locality can be found than in these counties for sheep, as Messrs Ross & McClintock can show you any day in three hours drive, and it is considered that cattle from these counties are superior to those from any other locality.

Kansas Cities and Towns.

The following is a list of towns in Kansas having upwards of one thousand population:

Topeka	16,643
Leavenworth	13,204
Atchison	11,000
Lawrence	8,478
Wichita	5,235
Fort Scott	5,010
Wyandotte	4,012
Emporia	4,001
Ottawa	3,507
Salina	3,383
Marysville	3,324
Parsons	3,130
Independence	2,820
Newton	2,539
Hutchinson	2,393
Junction City	2,345
Olathe	2,260
Beloit	2,194
Winfield	2,103
Osga City	2,003

Diversified Farming.

Wheat growing in eastern Kansas has been so profitable, and the yields have generally been so large, that farmers are inclined to concentrate all their force and means and individual care to the culture of wheat alone. There is a great risk in depending on a single crop, whether it be hay, wheat, corn, or cotton. If one look around the United States for wealthy centers of agricultural population they will be found where a diversity of crops are raised, and not where all the resources of the community are staked on one crop alone.

Farming in its proper sense means tilling the soil for a variety of purposes. It is evident the ground is capable of growing corn, potatoes, beans, oats and rye, as well as wheat, and never was intended for either one of these crops, but for all.

Farming is the only calling by which the human family can subsist, and should be studied with care. People have lived and flourished without lawyers, without doctors and without a thousand other occupations and professions, but never in the history of the world have any civilized people been able to dispense with the tillers of the soil. So it should be the farmers' duty and pleasure to learn out of time and experience the best plans for making farming attractive and profitable. Special dispensation of Providence may be the means of destroying any one crop, but it seldom happens that all kinds of vegetation are destroyed by excessive drouth or too much rainfall. What is destruction to one crop is often salvation to another. Thorough cultivation and a variety of crops will insure every industrious farmer a competence.

Where is the Stock-Grower's Best Place to Locate?

This is a question to the man about to locate himself in the business of stock-raising. We don't intend to say that the part of Kansas that we now call your attention to, is any better than some other locations that might be selected, but we wish to give you a few facts to show you that the eastern part of the state is as well adapted to this part of the business as any other part of the country, and in some respects much better.

If you will consult any well informed stock-raiser in the west, he will tell you that the very best country for the stock man, is where you can have plenty of range and at the same time be located close by a grain belt, where you can have abundance of corn to feed, and where the grain may be had at a small cost. As a general rule it will not pay to ship corn to market by rail, but it does pay to feed it in the vicinity where it is grown to stock.

In Shawnee county, Kansas, there is a large scope of country which cannot well be excelled anywhere for the production of corn. In the valley and creek bottoms you will find a first-class belt of corn land, that will produce from forty to eighty bushels to the acre. Back of the rivers and creeks are rolling prairies that are more valuable for their grasses than for any other purpose they could be used for, while there is an abundance of good upland that will bring a fair yield of grain to the acre. There is also much of it so rolling and broken by ravines that its cultivation for grain will not be attempted for years hence. Such a country as this is well suited for the stock-grower, for here he may have both grass and corn at a small cost.

We desire to call your attention to another reason why this part of our state is well adapted to stock-growing, and that is the close situation it bears to the great cattle market of the west, being not a greater distance than sixty miles from the great slaughter-pens of Kansas City. All well informed stock men and shippers know the great advantage in short hauls by rail, when you can load your cattle at evening and unload the next morning in the stockyards, ready for sale the same day.

The bottom lands along the rivers and smaller streams are settled up, but further back, up on the table-lands, where the lands are not so good for farming purposes, it is very sparsely settled yet. The lands are owned to a considerable extent by non-residents, and while they pay the taxes and are waiting for big prices for their land before they will sell, you may buy yourself a suitable ranch close at hand, and use all this vast acreage of wild land to graze your stock on.

We would like to say right here, and after we have said it we will not have said anything but what every well informed man knows to be true, and that is this: that farming cannot be carried on successfully for any given number of years where the farmer's attention is devoted to grain-growing exclusively. The variation in seasons and in prices; the liability to an overstocked market and high rates of freights for hauling the grain to market; the occasional damage from drouths, floods and insects, keep the tiller of the soil who depends on grain-raising alone, in uncertainty, and often cause him the loss of a whole season's labor and expense. Grain-growing should always be accompanied with raising of cattle, horses, sheep, or swine, and the country that affords the best facilities for the production of both grain and live stock, offers the best inducements to settlement. This is the case of lands in Shawnee county, Kansas. The yield of corn is great in the valleys and smaller streams, and presents extensive tracts of the finest bottom lands to be found anywhere in America. The large, uncultivated prairies, covered with a rank growth of nutritious grasses and well supplied with pure, running streams and springs of cold water, will for years to come furnish you wide ranges of free pasturage. The mildness of the climate; the dryness and purity of the atmosphere; the freedom from winter rains and snow; the entire absence of low, marshy land, with the fine advantage afforded by railroads and its near location to market, render Shawnee county well adapted to stock-raising; and don't you forget that no country is a good country that will not grow plenty of corn as well as grass. You want them both, one as much as the other.

Come and see our country and decide for yourself.

Synopsis of the Tax Laws.

Under the law "Providing for the assessment and collection of taxes," approved March 4th, 1876, (by which all previous laws are repealed,) real estate is listed and valued biennially, beginning with the year 1876.

The assessor, whose duty it is, lists all property at the value it possessed on the first day of March, and must complete and deliver his returns to the county clerk, on or before May 10.—See secs. 11, 43 and 49.

Any change in value, by reason of addition or loss of improvements, may be made each intermediate year.—See sec. 69.

The board of county commissioners of each county meet, as a board of equalization, on the first Monday of June of each year, to equalize the valuation of property within the county.—See secs. 74 and 75.

The state board of equalization meet on the second Wednesdays in July of each year to equalize the value between counties. The values established by them is final, as a basis upon which to levy the taxes.—See secs. 79 and 159.

All taxes on real estate become due and payable, and attach as a lien on the property, on the first day of November, of the year in which

such taxes are levied—and such lien continue in force until such taxes and charges have been paid in full.—See sec. 85.

In the absence of any express agreement to the contrary, the grantee (the person to whom the land is conveyed) is required to pay the taxes on property transferred between March 1st of the year in which such taxes are levied; but the grantor (the person conveying the land) must pay them if the property be conveyed between Nov. 1st and March 1st following.—See sec. 86.

Any person liable for the payment of taxes can pay the whole amount due on or before December 20th, and receive a discount of five per cent. on one-half; or, if he prefer, he may pay one-half at the above date, and the remaining one-half on or before June 20th next ensuing, without penalty. If, however, the full one-half be not paid on or before December 20th, the total amount becomes due, and a penalty of 5 per cent. attaches at once to the amount remaining unpaid. If still unpaid on March 20th following, another penalty of 5 per cent. is added, and the land becomes subject to sale for the same.—See secs. 91 and 105.

Such lands are advertised for sale between July 1st and 10th, and sold on the 1st Tuesday in September for the taxes and charges thereon.—See sec. 106.

The purchaser receives a certificate from the county treasurer for the amount so paid, which bears interest at the rate of 25 per cent. per annum, and all subsequent taxes paid and endorsed thereon bear the same rate per cent. until redemption, and at the expiration of three years the holder becomes entitled to a deed, unless the same shall have been redeemed.—See sec. 127.

Land may be redeemed from the operation of a certificate of sale any time within three years from the date thereof, by paying the county treasurer the full amount of taxes due thereon, together with all interest and charges.—See sec. 127.

A suit to set aside a tax sale or avoid a tax deed may be instituted any time within five years from the date of recording said deed.—See sec. 141.

A party bringing suit whereby a tax deed is declared void, is required to pay all taxes, interests and charges for which said deed was given.—See sec. 142.

HERE IS

Where you get your Money back

—AT THE—

Real Estate and Exchange Agency

—OF—

ROSS & MCCLINTOCK,

The Boss Land Firm

—OF—

TOPEKA: KANSAS.

This is the LARGEST LIST of Real Estate ever Offered by any One Firm—and This is Only a PARTIAL LIST of LANDS on OUR BOOKS for SALE.

Shawnee county and vicinity is the best stock raising country in Kansas. No county in the state has a larger yield of wheat, averaging 18 to 43 bushels per acre and no county in America can beat us for corn, vegetables and fruits. We present you herewith a partial list of our Lands and Farms on sale.

CITY PROPERTY.

2 lots corner 2nd and Washington streets. Large 8 room frame house in good order. Splendid place for boarding house. Price \$2500. Come and see us.

Here's your 2 1/2 acres overlooking city. Good location, high ground. Stone house, 5 rooms. Fenced and cultivated. Price \$700, if taken soon.

Here's another 5 acres, south-east of city, on high ground, fenced and cultivated. Some forest and fruit trees. Price \$500. House very poor.

One lot on Jefferson street, 2 story frame house, 5 rooms; stable, fruit trees and grapes; good well. Price \$725.

197 & 99 Buchanan street: good location, fenced, front east and can be bought for \$250. This is a bargain.

201 & 203 Buchanan street: good location, fenced and front east. Cheap at \$250.

Here is a good dwelling and lots on 10th Avenue, near business; fronts north; 6 or 7 rooms. Can be bought at a bargain, if taken soon.

Here is a large frame house, new, on Kansas Ave., between 10th and 11th Streets; fronts east; one lot. Can be bought at a bargain, if taken soon.

1 1/2 acres of ground south of Keith Green House, on Kansas Avenue; one story frame house, 4 rooms; cellar, well, stable, fruit trees; nice place for garden. Price \$380.

Three choice lots, 350, 362 & 364 Topeka Avenue. Price \$1000. Also 85, 88, 90, 92, 94 & 96 Jackson street; 349, 351 and 353 Taylor street; 152, 154 and 156, and 217, 219 & 221 Western Avenue. Can be bought at a bargain.

One lot on Monroe street, between 14th and 15th streets; fronts east; 1 1/2 story frame house, 5 rooms and out-kitchen; good well; fruit and shade trees. Price \$600, half cash, balance in 2 and 2 years on monthly payments.

Lots 18 & 20 Washington street, \$300. Lots 22, 24 & 26 Jefferson street, north corner, \$600. Lots 90, 92 & 94 Perry street, \$450. Lots 70 & 72 Hancock street, with trees, \$800. Lots 8, 15 & 711 Hancock street, \$450. Lots 42, 43 & 47 Klein street, \$450. Lots 55 & 56 Klein street, \$800. 1/2 cash, balance in 2 and 2 years at ten per cent. interest.



FIFTH AVENUE HOTEL, TOPEKA.

Nine lots between Crane and First, with house of 4 rooms and kitchen, cellar and well; fenced; 100 peach trees and shade trees. Price \$2000. Cash and time.

Lot and a half on Madison street, between 6th and 7th streets; fronts east; 3 room house, cellar, well, cistern and trees. Price \$800; cash and time.

Here now is your fine location. 6 choice lots, front east and south on 6th Avenue. West and Lincoln streets; fenced; fruit and shade trees; just the place for a nice home. We will sell the whole six for \$3000 cash.

12 choice lots, fronting east and north on Lincoln street, between 5th and 6th streets; fenced; fruit and shade trees; high ground, overlooking city. Price \$25 each, will not sell less than three.

22 good lots fronting west on Lane street, between 5th and 6th; fenced; fruit and shade trees; high ground. Price \$100 each, will not sell less than three.

Three good lots on Harrison street, between 20th and 11th streets; front west. Price \$1000.

Three good lots on Tyler street, front west, between 5th and 6th streets. Price \$500.

Lot 178 with 2 room house, fronts south; painted; well, coal house and trees. Price \$700, and can buy adjoining lot.

Hotel in Wamego, Kansas; frame, 50x70; lot 61x150; 20 rooms; all in good order; 2 and 3 stories, furnished. Price \$3000, and will invoice furniture at what it is worth. All to exchange for desirable city property in Topeka of equal value. This hotel is well located and doing a good business in one of the best towns on the K. P. & R.

Lots 97 and 99 Klein street, front east; near depot. Price \$250.

Lots 307 and 309 Polk street, front east; 1 1/2 story frame house; fenced; well, small stable. Price \$950, cash and time.

Lot 331 Kansas Avenue, fronts east; good location. Price \$500, cash and time.

Lots 55, 57 and 59 Van Buren street fronts; fenced. Price \$500. Cash and time.

Lots 164, 166 and 168 Van Buren street. Near business between 5th and 6th streets. Price \$1000. Cash and time.

Lots 344, 346 and 348 Taylor street, near Seminary. Good location. Price \$500. Cash and time.

Lots 26, 28 and 30 Tyler street, near 2nd street. Price \$450. Cash and time.

Lots 374, 376 and 378 Tyler street, good location, between 11th and 20th streets. Price \$500, cash and time. Any of the above lots can be bought for 1/2 cash, balance to suit purchaser at 10 per cent. interest.

Lots 67, 69 and 71 Jackson street, near business street, fronts east and south. Price \$750, if taken soon.

Lot 29 Topeka Avenue, fronts east, nice yard on each side. Can be bought for \$250.

One acre of ground, 1 1/2 story stone house, 2 rooms with kitchen and cellar, on north side of 4th Avenue east. John Hull's place in Parkdale addition. Good well, stable, fruit and shade trees, and a nice little home. Price \$900, cash.

One lot 90x100 feet on 107th street, New York city, fronting north, to trade for Kansas land.

Lot 108 and north 1/2 of 105 Tyler street; fronts east; good location, plenty of fruit and shade trees; good frame house, 1 1/2 story, 5 rooms; good stable and a good well. Price \$1500.

Two lots, front west, between 6th and 7th streets, on Buchanan street. Good frame house, 5 rooms, cellar and basement; good stable and cow stable, and fenced; fruit and shade trees, good well. Nice little home. Price only \$1100, cash.

Part of lots 1 and 2: 100 feet front, 150 feet deep on 6th Avenue east, in Chandler's Addition. 2 frame houses, one of 3 rooms and trace other has 2 rooms; fruit and cistern. Price \$1200.

Allen House, 12 rooms: three good lots, front east on Kansas Avenue, between 12th and 13th streets; well of a barn. Price \$2500.

2 acres of ground across Shunganunga Creek, south of 10th street. Two houses, well, cellar under large house; plenty of fruit of all kinds; fine garden grounds. Price \$2000.

Lots 42 and 44 8th Avenue, east, 5 room house, well &c. Price \$1600.

333 and 335 Lake street, Metaker's Addition. 1 1/2 story frame house, 4 rooms, closets &c. Well, fenced, fronts east. Price \$600.

Lot 4 Monroe street, fronts west; 1 story frame house, 2 rooms; Price \$125.

Lots 37 and 40 Madison Avenue, 80x160, Cleveland, Ohio. Will trade for Kansas property. Also piece of land in northeast Erie Co., Pa.; fenced and in grapes; size of land 8 rods wide and rods and 2 1/2 feet deep. Will trade for Kansas lands.

Lots 494, 496 and 498 Kansas Avenue; new frame house, 1 1/2 story, 6 rooms, good cellar, well and cistern; fruit and shade trees. Price \$1500.

Lot 116 Branner street, Metaker's Addition. Stone house, 18x31 1/2. Price \$800, cash and time.

Lots 9 and 11, 10th Avenue, west, 2 blocks from Capitol. Good location. Price \$650, if taken soon.

Lots 297 and 299 Madison and 7th streets, fronts east and north, with good new frame residence; 2 stories, with 8 rooms, pantry and closets, and good cellar. A No. house with all the modern improvements; good well. Can be bought for \$2500.

Lots 21 and 23 Kansas Avenue, fronts east. Will sell for \$1000, or lease on long term for \$100 a year, quarterly in advance.

6 choice lots on corner 6th Avenue, West and Buchanan streets. Good location. Price \$200 a number.

Lots 32, 34 and 36 Adams street. Price \$500. Cash and time.

Lots 99, 201 and 203 First Avenue east. Price \$300. Cash and time.

One lot, fronts east, between 6th and 7th streets on Adams street. Good story frame house, cellar, well, and fruit and shade trees. Price \$600.

Here is your nice residence only 3 blocks from Capitol and 5 blocks from Postoffice. Corner lots; good frame house, 9 rooms, good cellar, barn for 2 horses, buggy sheds, well and cistern, plenty of fruit and shade trees. No. 1 neighborhood. Can be bought on December 1st, 1879, for \$3500. This is a bargain, if you want a home.

Fifth Avenue Hotel, one of the finest hotels west of St. Louis, centrally located, has 50 rooms, large grounds for additional room when required. This hotel is in same block with the government building and postoffice, now being erected; most convenient hotel to A., T. & S. F. R. R.; rooms all fine and airy; convenient to business part of city and the popular hotel for the better class of the traveling public; very desirable for persons wishing quietude and first class accommodations, and offered at the exceedingly low price of \$21.00, just about what the grounds are worth, having 150 feet front on Quincy street and 75 feet front on 5th street.

1 1/2 lots on Jackson, between 6th and 7th streets, with 1 and 2 story brick house, fronts west, convenient to business, only one block from Kansas Avenue; centre of business part of the city; very desirable and cheap at \$2500, cash and time; good cellar, well and cistern, and brick stable.

No 247 Large 6 room stone house on Quincy street, between 14th and 15th, stable, well, fruit, etc, 2500 dollars, to exchange for farm.

No 29 Lot 121 Kansas Avenue.

No 35 Suburban property—1 1/2 story nice frame house, stable, fruit, cellar, well, cistern, etc, can be bought cheap, and is desirable.

Stone house, 2 rooms and basement, stable, well, fruit and shade trees. Lots 206 and 208 Clay street. Price \$800. Cash and time.

2 story frame house with story kitchen, 5 rooms, windows hung on weights, shutters, good cellar. Lot is 40x150 feet, fronts north on 8th Avenue near 7th street. New house, well finished. Price \$1300. Cash and time.

373, 375 and 377 Polk street, fronts east, good location. Price \$500.

401, 403 and north half of 405 Polk streets; fronts on highest ground in the city, overlooking city and country. Good story frame house, 5 rooms, well finished blinds, good cellar, well and cistern; stable, plenty of fruit and shade trees, and a nice cozy home. Price \$1350, cash.

322, 324 and 326. Choice corner lots, Polk and 12th streets; will make a nice building location. Price \$600.

We have for sale one of the best drug stocks in the city.

Also a good paying notion and fancy stock. The best paying business in the city for sale—\$5000. Pays \$7000 to \$10,000 per year. No capital required for purchase. The business has paid in past 5 years over \$25,000, and increasing daily—is well established and widely advertised.

No 131 Lots 362, 364 and 366 Polk street, corner 11th, 700 dollars.

No 41 3 lots, Hancock and 7th, 1 1/2 story stone house, five rooms, fine residence for a railroad man, can be bought cheap.

No 242 Three choice lots, good 4 or 5 room house complete, east of Shunganunga, only \$800, terms easy; this is decidedly a cheap property.

No 42 Lots 218, 220, 222, corner Western Avenue and 7th street, only 300 dollars.

No 51 Lots 40, 42 and 44 8th Avenue west, 1 1/2 story frame house, 5 rooms, stable, well, cistern, etc, etc, \$700; cheap.

No 68 Lots 119 and 1 1/2 of 121 Jefferson street, front east, nice, cozy 5 room house, between 4th and 5th street, \$1100.

No 241 This is the nicest little house, 5 rooms, veranda, porch, hall, blinds, windows hung with weights, good cellar, cistern, stable, etc, etc, complete, neat home, only 1800 dollars; 10th Avenue, two lots.

In addition to our city list we have several hundred lots and residences on sale.

No 437 5 acres suburban; large stone house, 16x30, ell 16x16; 200 fruit and shade trees, John's city; splendid garden and fruit grounds, 2500 dollars.

243 Nice four room house, two lots, Topeka Avenue, between 2nd and 3rd, plenty fruit and shade trees; pleasant home; only \$1200.

244 115, 117, 119 and 121 Polk street; a good 4 room, one story house, good stable, 14x22, well and cistern, fruit and shade trees; price \$1000, sell for cash and time, or exchange for land.

273 Lots 265 and 267 Clay street, front east, good frame house, 4 rooms, cellar, cistern and stable; price 900 dollars, cash and time.

278 4 acres North Topeka on R. R. track, 1/2 mile west of K. P. water tank, south side R. R., 4 room frame house, apple, peach and cherry trees, plenty small fruit; lands run to river, all fenced; price \$1000, will take team, wagon and harness or cattle in part pay.

281 Three choice lots on Monroe street, near business, fronts east, large frame house, barn and everything complete, only 300 dollars.

282 5 lots corner Quincy and 6th Avenue; east with building; big bargain; price only \$500; if taken soon to raise all money.

283 8 choice lots on Hancock street, between 2nd and 3rd streets, can be bought for 100 dollars each.

285 Centre 25 feet of lot 83 Kansas Avenue, North Topeka; price 500 dollars.

275 Lots 327 and 329 6th Avenue east, good place to start a grocery and provision store; good settlement addition; frame store building 12x24, two stories, good well, store room with counters and fixtures for a grocery; 3 rooms up stairs, furnished in good shape for living rooms; price only 900 dollars, cash 500 dollars, balance on time; now is your time for a good location and bargain.

276 Good frame house and grounds, fronts Capitol square, Jackson street between 6th and 10th streets; all up in good shape; price only 2100 dollars.

280 Here's a bargain; 3 good lots on Monroe street, in central location; good stone house, plenty of fruit and shade trees, and everything to make up a home; price \$500.

279 Here you are now, large stone house and necessary outbuildings; fronts east and in the most desirable part of the city; three good lots on Topeka Avenue, plenty of fruit and shade trees, between 6th and 8th streets; now don't ask us to give you this place, but come and see us.

256 Lot 280 Kansas Avenue, between 6th and 9th streets, price 1000 dollars.

259 Two good lots on Polk street, frame house 2 rooms, cistern, cellar and trees; price 300 dollars; between 2nd & 3rd.

261 Two good lots, Topeka Avenue, between 3rd and 4th streets, stone house 5 rooms; will sell at a bargain.

283 Two choice lots, 99 and 95 10th Avenue west; can be bought for 225.

265 Lots 6 and 7, 6th Avenue east, in Parkdale Addition, on 6th is good stone house 16x20 with cellar and frame kitchen, 9x24, and all necessary out buildings, good well, force pump, plenty shade and other trees; price 1500 dollars.

Lot 7, large stone house 12 rooms and cellar, 18x30, suitable for two or four families, plenty shade and evergreens; will take 2000 dollars or sell both for 3600 dollars; large house rents for \$32 per month, small house 8 dollars per month; there is mortgage \$1100, can run 5 years at 10 per cent. interest; come and see us.

No 286 Three good lots on Topeka Avenue and 2nd street, fronts south and east, 1 1/2 story frame house with basement, 11 rooms, good well and cistern, plenty fruit and shade trees, small stable and other out buildings, everything in good shape, newly painted; price only 2500 dollars, half cash, balance on time.

No 367 Two good cottages on Kansas Avenue, between 18th and 14th streets; will sell one or both, price \$300 dollars each.

No 286 Two good lots on Harrison street in the south part of the city, frame house 3 rooms and basement, well, barn, cistern and fenced; price only 600 dollars.

No 289 Here is a No 1 two story brick building, plate glass front, good location on Kansas Avenue, building just new. Price \$500 dollars.

No 290 Here is a big bargain; No 1 business lot on Kansas Avenue with buildings in the centre of city; can be bought for 4500 dollars.

No 291 5 choice lots on 6th Avenue east, 26, 28 and 30, corner 6th Avenue and Harrison street, 181 and 122 6th Avenue and Quincy street; price only 6500 dollars for the whole outfit.

No 292 Lot 23 8th Avenue west, stone house three rooms, good well; price 800 dollars.

No 238 Very desirable three lots on Van Buren and 2nd, 5 room house, plenty of fruit, cistern and nice shade, cheap at 800 dollars.

No 130 Lots 73 & 75, 10th Avenue west, 500 dollars.

No 129 Lot 234 Kansas Avenue, 2500 dollars; twenty inches stone wall goes with this lot.

No 137 235, 237 and 239 Clay street, stone house, well and cistern; 800 dollars; cheap.

Covering Strawberries.

The strawberry endures cold well, but not the great sudden changes of temperature, and cold, drying winds. If the situation is such that the plants are not exposed to the winds, and the stools are large and thick with foliage, this foliage will be a sufficient protection; doubtful, however, should the snow be very deep and close-packed, and lie long, or ice form on the surface of the ground, locking it for a long time. It is worse still if the frost extends deep into the ground. Under such circumstances the smothering influence may either kill the plant, or seriously injure it. The plants without covering are safe where the winter is mild and the soil has perfect drainage. But the safe thing is to cover the plants. For perfect protection I find nothing so good as hemlock brush, or straw kept in place by a hemlock bough, with the concave side under, thus preventing the fatal pressure of the snow. I put on the covering at the beginning of winter, and keep it on until spring frosts are over. The plant will then come out fresh, strong and unharmed, and immediately push its growth.

This answers for a small plot of ground. For field culture, light stable manure, with three or four parts of sand, or other fine vegetable absorbent, to one of manure, succeeds well as a covering, but should be used only where the soil requires the fertility, as too high manuring produces foliage rather than fruit.

Vegetable material worked into the soil is one of the best elements in strawberry culture, as also in the culture of other berries. It loosens clay and improves the character of sandy soil, seeming also to form the right pabulum for the fruit. I also get the best crops and the finest berries in this way. Two weeks ago I gave the plants a sprinkling of liquid manure (diluted urine), and they are brightening up and invigorated so as to withstand the winter better, and put out strong and early in the spring. This attention is only a trifle, but it helps a good deal. The strawberry, like the grape, is very susceptible to treatment, and can be made to do much more than we usually see.—F. G., in Country Gentleman.

About a New Invention.

My communication is not what I intended it when I commenced; I intended it for a crop report. I have one fault—I do not like to commence to write, but when I do commence it seems I can not find a stopping-place and write too much.

The matter of constructing a cheap shelter for hogs, and a manger or rack for cattle, of sufficient capacity to hold two or three tons of hay at a time, without wasting any, for out-door cattle-feeders, has engaged my attention and inventive powers for years. I am happy to say that I have at last succeeded, at least to my entire satisfaction. It is worthy of a patent, but I shall not apply for any. If you desire it, I will give it for the benefit of your numerous readers, but it is necessary to make a diagram so it can be easily understood and its advantages readily comprehended. It need not cost \$5, including labor and all. It will hold two or three tons of hay, and it can be put in and perfectly protected at the time it is put up, until it is needed, as the hay will cure out and keep better in it than it will in an ordinary stack. At least twenty head of cattle can feed from it without wasting any, and at least thirty head of hogs can be sheltered under it, in the snugest manner possible. It is always dry and comfortable as any shelter you could possibly build, with one large opening to the south, and no danger of larger ones over-laying smaller ones.

Now, what will you give if I establish all the above points and facts to your entire satisfaction?—SAMUEL STONER.

We will give the invention a wide-spread notoriety among farmers by publishing the description of the combined hay-rack and pig-shelter.—[Ed.]

Patrons of Husbandry.

NATIONAL GRANGE.—Master: Samuel E. Adams, of Minnesota; Secretary: Wm. M. Ireland, Washington, D. C.; Treasurer: F. M. McDowell, Wayne, N. Y. EXECUTIVE COMMITTEE.—Henry James, of Indiana; D. W. Aiken, of South Carolina; S. H. Ellis, of Ohio. KANSAS STATE GRANGE.—Master: Wm. Sims, Topeka, Shawnee county; Secretary: P. B. Maxson, Emporia, Lyon county; Treasurer: W. P. Poppenoe, Topeka; Lecturer: J. H. Martin, Mound Creek, Miami county. EXECUTIVE COMMITTEE.—W. H. Jones, Holton, Jackson county; Levi Dumbauld, Hartford, Lyon county; J. S. Payne, Cadmus, Linn county. COUNTY DEPUTIES.—J. T. Stevens, Lawrence, Douglas county; T. E. Myers, Beatty, Marshall county; E. B. Powell, Augusta, Butler county; C. F. Morse, Milo, Lincoln county; A. J. Pope, Wichita, Sedgewick county; A. P. Reardon, Jefferson Co., Post Office, Dimond, Leavenworth county; S. W. Day, Ottawa, Franklin county; G. A. Hovey, Belleville, Republic county; J. E. Barrett, Greenleaf, Washington county; W. W. Cone, Topeka, Shawnee county; J. McComas, Holton, Jackson county; Charles Disbrow, Clay Centre, Clay county; Frank B. Smith, Rush Centre, Rush county; G. M. Summerville, McPherson, McPherson county; J. S. Payn, Cadmus, Linn county; Charles Wyeth, Minneapolis, Ottawa county; F. M. Wierman, Mildred, Morris county; John Andrews, Huron, Atchison county; George F. Jackson, Fredonia, Wilson county; D. C. Spurgeon, Leroy, Coffey county; James W. Williams, Peabody, Marion county; R. T. Ewalt, Grand Bend, Barton county; O. S. Worley, Eureka, Greenwood county; James McCormick, Burr Oak, Jewell county; L. M. Earnest, Garnett, Anderson county; D. P. Clark, Kirwin, Phillips county; George Fell, Larned, Pawnee county; A. Huff, Salt City, Sumner county; James Faulkner, Iola, Allen county; W. J. Ellis, Emporia, Lyon county; George Amy, Glen-dale, Bourbon county; W. D. Covington, Smith county; P. O. Kirwin, J. H. Chandler, Rose, Woodson county; E. F. Williams, Erie, Neosho county; J. O. Vanradar, Winfield, Cowley county; George W. Black, Olathe, Johnson county; W. J. Campbell, Red Stone, Cloud county; John Behring, Fairfax, Osage county; I. S. Fleck, Bunker Hill, Russell county; J. K. Miller, Sterling, Rice county; W. D. Rippine, Severance, Doniphan county; Amos Sharp, Grand, Crawford county; P. B. Maxson, Emporia, Lyon county; A. M. Switzer, Hutchinson, Reno county; S. N. Wood, Cottonwood Falls, Chase county; G. S. Kneeland, Keene, Wabasha county.

TO OFFICERS OF SUBORDINATE GRANGES. For the use of Subordinate Granges we have a set of receipt and order books which will prevent accounts getting mixed up or confused. They are: 1st, Receipts for Dues, 2nd, Secretary's Receipts, and 3rd, Orders on Treasurers. The set will be sent to any address, postage paid for \$1.00.

We solicit from Patrons, communications regarding the Order. Notices of New Elections, Feasts, Installations and a description of all subjects of general or special interest to Patrons.

At a meeting of delegates from the several granges in the county, last Saturday, Wm. Ayers, master of Silver Lake grange, was elected delegate to the State grange, and Thos. White, master of Oak Grove grange, as alternate. The State grange meets this year at Olathe, Johnson county, December 16th.

Co-operation.

[Extract from the address of Master of West Va. State Grange.]

As to the great advantages of co-operation, I may say no more than to repeat to you what I said in my report as chairman of your executive committee, at the last session of our state grange—"That we cannot urge too strongly upon the members of our order the great necessity of co-operation. Singly, we cannot accomplish any good. Reforms must be effected by associations, co-operating for a common purpose. It must be done by concerted action and concentrated effort."

Bound together, as we are, by the ties of a common purpose, and of mutual dependence, every member is a fountain of influence and an example to others. It is an old saying "that no man liveth to himself." He cannot. His plans and operations may all revolve around himself; but yet they will and must effect the interests of others. He cannot limit the effects of his plans, nor can he entail the inheritance of his estates. Changes abolish his isolated plans and scatter the earnings for which he lives to individualize.

The object of our order is to ignore individual selfishness, and to make us more generous and catholic, and to embrace within its folds all who seek the advancement of agriculture, no matter of what name, sect or party.

The grange can never advance in material prosperity and usefulness until its members have learned to operate in all things pertaining to their advancement and interests.

It is truly sad to contemplate the disorganized condition of the agricultural class; yet upon their labor rests the whole prosperity of this country.

It is by their labor the ocean is whitened with commerce. It is only by their labor the national debt can be paid. Knowing these things, is it not most astonishing that the farmers cannot spare the time to attend their grange meetings, and so lack enterprise and foster an organization which alone can elevate them, and procure for them that influence and position in society which their numbers and wealth entitle them. You have the numerical strength and wealth, but you sadly lack that fidelity to your own interests to accomplish much, if any good. Although a grange may include every citizen in a neighborhood, yet if the members act independently and alone they cannot accomplish anything; but if united they can form a power irresistible and capable of effecting for good the whole community. All advancement in society, or great undertakings, must be by united, combined and co-operative effort. So with the grange, to accomplish much good it must be done by co-operation.

Political Activity.

Taking care of the political affairs of the country is just as legitimate as any other business the farmer has to attend to.

The trouble is that the politicians, by their rascality, have undertaken to make politics so odious that no decent man would meddle therewith. Their object in so doing must be plain to all. But politics need not necessarily be vile. Indeed, it should be the very reverse. It involves many of the most sacred duties with which the generation is charged. And to perform those duties well, requires integrity and honor of the highest degree. No act of citizenship can be more noble than to engage in politics without doing mean things. No man who has a just appreciation of American citizenship can neglect attending to politics and possess a clear conscience.

This great nation—the mightiest on the face of the earth—must be managed by somebody. If the virtuous neglect their duty the vile will take charge of affairs. There is no escape from the responsibility. The men of this generation owe to future generations a duty which cannot be ignored. Then let every farmer ask himself, "What is right and fit to be done in my day and generation?"

Every one who looks at things as they now exist, will see that the crying evil of the times is the monopolization of official positions by a class of lawyers who are, directly or indirectly, attorneys for railroad, banking and other corporations. The consequence is that the passage and execution of the laws are in the interest of the said corporations.

The men who pay the bills in taxes, in transportation, and in interest on money—the farmers have little to say. When the tickets are fixed up for them they are called out to vote—that is all. Now, if farmers permit matters to go on thus, will it be because they are too ignorant to correct the evil? If they do not defend themselves and look out for their interests as the transportation companies and bankers do theirs, it will be attributed to their stupidity. To us it does not seem to be a want of intelligence upon the part of farmers. They see and understand these evils, and would be glad to correct them if they could do so without offending anybody—they are solicitous about the feelings of the gentry who smile upon them when they go to town.

The legal fraternity has had possession of the offices so long that it now claims them by right of "squatter sovereignty." This claim can be successfully resisted only by a united effort upon the part of farmers. What they want is the

exercise of more nerve. In times past they have been too passive—too pliable. They must get right up, take the bit in their teeth, and refuse longer to be guided by the court house rings.

If farmers do not have an understanding among themselves, and their men selected for certain places before going into a political caucus or primary election with the city chaps, they will be beaten.

Through their modes of practice they cheat justice out of her eye-eth, and they have proven themselves able and willing to cheat the farmers out of their liberties and property rights.

There is but one safe course for farmers, and that is to trust themselves. If they want just legislation they must put enough of their own class there to rule the roost.—Journal of Agriculture.

Grange Paragraphs.

It is in the grange, as in every organization, that the few must take the lead, and too often there is a feeling of complaint that the burden is imposed on the few. This is the wrong view of the whole matter. It is the fewest number of men who are qualified by nature to stand in the front rank and be leaders of men. There is required not only executive ability, but the test of genius—invention. There is needed a perception of what is best to be done, and talent to carry these out successfully. Usually the best success follows where the thinker and worker join hands and work for a common end, but let all things be done in harmony.

When we consider that the main purpose of the grange organization is to promote the interest of the farmer, the surprise is, that every farmer whom the grange would consider worthy does not become an active member of the fraternity. Yet, singularly enough, we find in every neighborhood farmers who are as vigorous opponents as the worst-injured middlemen. They decide on false premises, or rather without any knowledge of what they condemn. It is wasted time to explain or argue with these men. They know too much to be taught.

One grand feature of the grange, which in our consideration of its advantages we generally overlook, is the encouragement and facilities it gives to prevent litigation. More than half the law-suits come from farmers. Sometimes a lawsuit is like any other mean disease, comes in spite of you, and must be met. But the grange inculcates the doctrine that a bad compromise is better than a good law suit. It suggests to settle difficulties by arbitration. A tribunal in the grange gives every assurance of a speedy and equitable settlement without expense. This one fact ought to make the order popular among farmers. It has not only settled many disputes, but has avoided the causes of controversy.

There is a silly argument among some persons who oppose the grange after this style: Virtue, truth, upright dealing, the prosecution of legitimate business does not seek to hide itself under cover of darkness or a pass-word. Therefore, the declaration of principles and purposes of the order is a pretence and a sham—or to condense the thought, "They love darkness because their deeds are evil." We have called the argument silly. It deserves a more appropriate epithet. However bad men may be—and the men who make the objection seem to judge others by their own standard—they do not take their wives and daughters to places that are not above suspicion. Indeed, the mothers, wives and daughters would be the first to pronounce against the grange if it were not all it claims to be.

The grange has been in practical operation about six years. That the period has been six years of continued progress, is evident to any one who will take the pains to examine and compare. But there are two things patrons have yet to learn, and the learning of which seems to come by the harvest. The one is the breaking loose from long established custom, when successful experiment, the most intelligent judgment and applied science sanction the change. The other is, confidence. Farmers have for so long time been accustomed to paddle their own canoes—to take no chances in co-operative schemes, that they look with distrust and suspicion on every proposition at variance with their preconceived notions and practices. Perhaps this is all well enough. But one of the missions of the grange is to build up confidence when confidence is due, and by getting out of the old ruts, improve with the times.—Grange Bulletin.

If the farmers ever expect to obtain relief from the unjust burdens they are compelled to bear for others, they must do it through their own efforts, they must become thoroughly organized, and educate themselves to understand what it is that oppresses them, what the burdens are, what ones are unjust or unreasonable and to whom they of right belong, and how to change them. We must learn what justice is and how to meet it out; we must learn how to equalize and distribute properly the blessings and burdens of government. And unless you do learn this, and take the necessary steps in the right direction for an equitable distribution, you will never get it, for just as long as you trust your all in the hands of politicians and political tricksters, and you remain idle and inactive as you have done, just so long will matters grow worse, and your burdens increase, and your privileges be curtailed. Hence the great necessity of grange work, in educating ourselves to understand the great questions with which we have to deal, and in which we are so deeply interested; and unless we take hold of them like men and act wisely and co-operatively we will always be the hewers of wood and the drawers of water.

Advertisements.

Our readers, in replying to advertisements in the Farmer, will do us a favor if they will state in their letters to advertisers that they saw the advertisement in the Kansas Farmer.

Shannon Hill Stock Farm

Thoroughbred Short-Horn Cattle and Berkshire Pigs, bred and for sale. Only first-class animals allowed to leave the farm. Address G. W. GLICK, Atchison, Kansas.

Nurserymen and Farmers

We are prepared to fill orders for Forest Trees—Seedlings of any size—at lowest prices, consisting of Maple, White Ash, Dogwood, Box Elder, Red Bud, Sycamore, and the famous Tulip so valuable for ornament, shade and timber. Address BAILEY & HANFORD, Makanda, Jackson Co., Ill.

POULTRY BREEDERS TAKE NOTICE.

I have a few choice Plymouth Rock and Brown Leghorn fowls for sale at reasonable figures if applied for soon. Address Mound City Poultry Yards, Mound City, Kansas.

60 Queen Anne and photo cards, illuminated and

performed, in case 10c Globe Co., Northford, Ct.

STRAYED OR STOLEN.

Strayed from the McClure place, 9 miles west of Topeka, on the south side of and adjoining the river, a three-year-old bay pony colt; had large W branded on left shoulder, a little white above each hind hoof, and a very little in forehead. White spot where saddle presses on back. Was missed Saturday morning, Sept. 27th. The finder will please leave at above named farm, or send word to: J. E. OS EN, 80 Topeka Ave., Topeka, Kas.

\$25 REWARD.

Strayed or stolen from the pasture, June 18th, one chestnut sorrel horse, about 15½ hands high, has brand on left hip, the letter (Z) rather dim, mane and tail rather heavy but not long. Said horse is 4 years old. The above reward will be paid for the delivery of said horse or any information leading to his recovery. A. D. HOWARD, Beaver City, Neb.

Durham Park Herds

ALBERT CRANE,

BREEDER OF

Short-Horn Cattle

—AND—

Berkshire Pigs,

Durham Park, Marion Co., Kansas.

Catalogues free. The largest and best herds in the west. Over 20 head of cattle, and a like number of pigs. Prices low. Address letters to DURHAM PARK, Marion County, Kansas.

HOGS.

Southern Kansas Swine Farm.

THOROUGHbred POLAND-CHINAS and BERKSHIRE Pigs and Hogs for sale. The very best of each breed. Early maturity, large growth, and fine style are marked features of our hogs. Terms reasonable. Correspondence solicited. RANDOLPH & PAYNE, Emporia, Kansas.

STOCK FARMS.

I have for sale a number of farms of all sizes, 1000 acres and more, in Montgomery, Page, Taylor and Adams counties, Iowa. Many of them have been fitted up expressly for stock farming. Some of them are largely in grass; have good fences and hedges, and enough of them.

This section of north-west Iowa is claimed to be better adapted to stock raising than any other portion of the country. Lands as well improved and equally or more productive, better adapted to grass and stock, are cheaper here than in the older stock-growing sections.

I have two elegant tracts, splendidly improved, of more than 1000 acres each, at less than \$35 per acre. I have farms ranging all the way from 40 to 1225 acres, at from \$7 to \$25 per acre. Come and see me. G. D. BAKER, Villisca, Iowa.

P. S. A flouring mill, elevator and grain business for sale at a bargain.

Holstein Cattle.

The largest importers and breeders of Holstein Cattle in America. Also large importers and breeders of Clyde-dale horses, and breeders of Hambletonian horses of the most approved strains.

Send for catalogue. Prices reasonable.

SMITHS & POWELL, Syracuse, New York.

THE

Weekly Capital.

The Dollar Family Newspaper.

Published at Topeka, Kansas, by

HUDSON & EWING.

The Weekly Capital, published at Topeka, Kansas is sent postage paid, one year for one dollar. It contains latest general telegraphic news, news from the principal cities of the state, and contributed and selected news from every county in Kansas. The decisions of the Supreme Court, proceedings of State meetings, conventions and such general literary miscellany and local intelligence from the State Capital as to make it desirable in every family. Send One Dollar by registered letter or post office order, and receive the paper one year.

SPECIAL ANNOUNCEMENT.

From and after January 1st, 1880 the Capital will be enlarged to a 32 column paper. Subscriptions taken at any time for one year, and the paper discontinued at the end of the time for which it is paid for. Sample copy sent free of charge to any applicant. In sending money for the Weekly Capital, mention the name of this paper, and write address plainly. Address

HUDSON & EWING,

Topeka, Kansas.

FOR SALE.

Native Bees in Quinby beehives. Mrs. E. D. VAN WINKLE, Pleasant Ridge, Lane County, Kansas.

Breeders' Directory.

G. B. BOTHWELL, Breckenridge, Mo., breeder of Spanish or Improved English and Improved sheep of Hammond stock, noted for hardiness and heavy fleece. 200 rams for sale.

L. A. KNAPP, Dover, Shawnee Co., Kas., breeder of Pure Short-Horn Cattle, and Berkshire Pigs.

C. S. EICHLT, Breeder of Short-Horns, Berkshires and Bronze Turkeys, Wichita, Kansas.

JOSHUA FRY, Dover, Shawnee county, Kansas. Breeder of the best strains of Imported English Berkshire Hogs. A choice lot of pigs from 2 to 3 months old for sale. Prices to suit the times. Correspondence solicited.

D. R. W. H. CUNDIFF, Pleasant Hill, Cass Co., Mo., breeder of thoroughbred Short-Horn Cattle of hedgeable strains. The bull at the head of the herd weighs 3000 pounds. Choice bulls and heifers for sale. Correspondence solicited.

HALL BROS., Ann Arbor, Mich., make a specialty of breeding the choicest strains of Poland-Chin, Suffolk, Essex and Berkshire Pigs. Present prices less than last card rates. Satisfaction guaranteed. A few splendid pigs, gilts and boars now ready.

Nurserymen's Directory.

THE KANSAS HOME NURSERIES offer a superior and Large Variety of trees for Western Planters, all the standard and choice varieties of Apples, Peaches, Cherries, Pears, Plums and Quinces, Small Fruits, Vines, Shrubby, and Ornamental Trees, No. 1 Apple Seedlings. Prices to all applicants. Send stamp for samples. A. H. & H. C. GRIESE, Lawrence, Kansas.

LEE'S SUMMIT AND BELTON NURSERIES, Fruit Trees of the best, and cheapest. Apple Trees and Hedge Plants a specialty. Address ROBT. WATSON, Lee's Summit, Jackson Co., Mo.

A. WHITCOMB, Florist, Lawrence, Kansas. Catalogue of Greenhouse and Budding Plants sent free.

MIAMI COUNTY NURSERIES. 11th year, large stock, good assortment; stock first class. Osage hedge plants and Apple trees at lowest rates by car load. Wholesale and retail price lists sent free on application. E. F. CADWALLADER, Louisburg, Kas.

Physician.

MRS. DEBORA K. LONGSHORE, M. D. Office west side of Harrison St., 1st door south of Sixth St.

HENRI LANNE, M. D., Physician, Surgeon and Oculist, Topeka, Kansas. Office in City Building, corner Kansas Avenue and Seventh streets.

Dentist.

A. H. THOMPSON, D. D. S., Operative and Surgeon Dentist, No. 139 Kansas Avenue, Topeka, Kansas.

TEETH extracted without pain, by Nitrous Oxide gas, or laughing gas, at Dr. STULTZ, Dental Rooms, over Funk's Clothing Store, Topeka, Kansas.

WOOL-GROWERS

Can rely upon immunity from contagious disease in their flocks after use of LADD'S TOBACCO SHEEP WASH. GUARANTEED an immediate cure for scab and prevention of infection by that terror to flock-masters. GUARANTEED to more than repay the cost of application by increased growth of wool. GUARANTEED to improve the texture of the fleece instead of injury to it as is the result of the use of other compounds. GUARANTEED to destroy vermin on the animal and prevent a return. GUARANTEED to be the most effective, cheap and safe remedy ever offered to American Wool-growers. No flock-master should be without it. I have the most undoubted testimonials corroborative of above. Send for circular and address orders to W. M. LADD, 21 N. Main St., St. Louis, Mo.

THE CENTRAL KANSAS

BREEDERS ASSOCIATION,

Offer FOR SALE,

As good Short-Horn Cattle, Berkshire and Poland China swine as can be found in the West. All orders should be sent to the Secretary of the Association. The Executive Committee of the Society will take such orders, and see that Selections are made that cannot fail to give satisfaction, to the purchaser.

A. W. ROLLINS, Secretary Kansas Central Breeders Association, Manhattan, Kansas.

American Berkshire

RECORD.

Notice is hereby given that entries in Volume IV of the Record will close December 1, 1879. For entry blanks or further information address PHIL M. SPRINGER, Sec. Court House Square, Springfield, Ill.

Kansas Pacific

Railway.

Lands! Lands!

KANSAS TO THE FRONT!

The Leading Wheat State in the Union in 1878, and the Fourth Corn State—The Great Kansas Harvest of 1878 was

32,315,361 Golden Bells!

The celebrated Grain Belt of country, in the limestone section of Central Kansas, traversed by the Kansas Pacific.

The following statements are taken from the report of the Kansas State Board of Agriculture for 1878:

WHEAT! Kansas rises from the Elev. 1st county produced 27,399,085 bushels, or 31 per cent, nearly one-third of the entire yield of the state, with an equally grand showing in all other departments of agriculture.

The record is also conclusively why four out of the five acres of population in the State are engaged in agriculture, and the reason for the increase in population during the past decade.

CORN! Kansas, the Fourth Corn State in the Union in 1878, produced 90,197,100 bushels of corn, of which the Golden Grain Belt counties produced 27,399,085 bushels, or 31 per cent, nearly one-third of the entire yield of the state, with an equally grand showing in all other departments of agriculture.

The record is also conclusively why four out of the five acres of population in the State are engaged in agriculture, and the reason for the increase in population during the past decade.

A FARM FOR SALE. 42,500 acres—5,000,000 acres—for sale by Kansas Pacific—the Best land in America—at from \$2 to \$6 per acre. One-quarter off for cash, or out of 11 years credit at 7 per cent. interest. It don't take much money to buy a farm on the Kansas Pacific; \$25 to \$50 will secure 100 acres on credit, or \$150 to \$300 in cash will buy it outright.

Send to S. J. Gilmore, Land Commissioner, Salina, Kas., for the "Kansas Pacific Homestead," a publication that tells about Lands, Homesteads, Pre-emption, Soil, Products, Climate, Stock Raising, Schools, Water, Land Explorer Tickets, Rates, etc. It is mailed free to all applicants.

Read all you can gather about Kansas, and when you decide to start, be sure and start right by locating along the KANSAS PACIFIC RAILWAY. T. F. OAKES, Gen'l Superintendent.

THE KANSAS FARMER.

HUDSON & EWING, Editors & Proprietors,
Topeka, Kansas.

TERMS: CASH IN ADVANCE.

One Copy, Weekly, for one year,	2.00
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RATES OF ADVERTISING.

One insertion, per line (nonpareil) 20 cents.	
One month, " " " 15 " "	
Three months, " " " 12 " "	
One year, " " " 10 " "	

The greatest care is used to prevent swindling humbugs securing space in these advertising columns. Advertisements of lotteries, whisky bitters, and quack doctors are not received. We accept advertisements only for cash, cannot give space and take pay in trade of any kind. This is business, and it is a just and equitable rule adhered to in the publication of THE FARMER.

TO SUBSCRIBERS.

A notification will be sent you one week in advance of the time your subscription expires, stating the fact, and requesting you to continue the same by forwarding your renewal subscription. No subscription is continued longer than it is paid for. This rule is general and applied to all our subscribers. The cash in advance principle is the only business basis upon which a paper can sustain itself. Our readers will please to understand when their paper is discontinued that it is in obedience to a general business rule, which is strictly adhered to and in no wise personal. A journal to be outspoken and useful to its readers, must be peculiarly independent, and the above rules are such as experience among the best publishers have been found essential to permanent success.

THE OLD RELIABLE.

The Kansas Farmer for 1880.

The Kansas FARMER for 1880 will be the most useful Farm and Family Agricultural journal ever made in the west. We have perfected arrangements for contributions for the FARMER upon every topic of interest to farmers, from the best writers in the west. From every county in Kansas we shall have farm letters, giving the latest farm news regarding fruit, grain, vegetables, stock and markets. The FARMER has for sixteen years been a faithful, earnest friend and co-worker with and for the farmers of Kansas. It neither stoops to pandering to prejudices for support nor does it fail to speak plainly and honestly for what it deems to be just and right concerning the rights and interests of agriculture. No department of the farm is neglected, and the reading for the mothers and daughters has always been carefully looked after. The FARMER is not a partizan, political paper; it is an agricultural journal and not a political one. Men of all shades of political opinion are among its friends and supporters.

The publication of the strays of the whole state under the stray laws passed in 1866, continue to be published in the FARMER. The FARMER being designated by law as the official paper for the publication of the strays, this feature alone makes the paper worth its subscription price to every farmer in Kansas.

OUR HARD-PAN CLUB OFFER.

To secure a good, large list of subscribers in every community, we have determined to reduce the club rates to the old "hard-pan figures," although we give our readers, in improvements and labor, the advantage of between \$2,000 and \$3,000 per year to us of additional cost.

OUR CLUB OFFER

is: Ten subscribers, to one or more post-offices, for one year, (fifty-two weeks) for \$10, and an extra copy to the club agent. All names to be sent at one time. Money by registered letter, post-office order, or draft, at our risk. Any person can act as agent who will secure the names and forward the money. Sample copies and club list will be sent free to assist any person who will try to raise a club.

We ask our friends in every county, at every post-office, to give the FARMER the benefit of their active help. There are thousands of new citizens who are farming in the west for the first time, and to such the FARMER, containing as it does the practical experience of the oldest and best farmers, fruit growers and stock breeders, is just what they want and will be worth many times its cost to them. Bring it to their notice and we shall continue to make the paper worthy the most earnest support of its many friends throughout the west.

To Our Correspondents.

When any of our regular correspondents have exhausted the supply of blanks on hand, they will be furnished with others, if they will drop us a postal notifying us of their wish. To any of the readers of the FARMER who feel inclined to contribute an occasional communication to its pages, we will send blanks prepared for correspondence, if they will notify us of their wishes.

Prairie Fires.

We have frequently urged the necessity of farmers taking timely precaution against loss by prairie fires. The Nebraska Farmer for November cautions its readers to pursue the same course. Those that have not already prepared for prairie fires should see to it at once, take advantage of the first calm day and burn a wide strip around all buildings and stacks, when possible burn at least two hundred feet wide. The extreme dry weather this fall has left the grass very dry, and unless great care is used the usual number of serious accidents from fires will occur. It is useless for us to attempt to give a history of the damage done in this way, there is scarcely a neighborhood but that has suffered more or less in the past, and yet a few hours work done at the right time would avoid all danger. Turn out and work while you have the advantage; save what you have raised, as well as to protect your lives.

Turkey Raising.

We conclude, this week, a very exhaustive and instructive article on the above subject, from the Poultry World, which may, we think, be taken as a safe guide to success in this branch of the poultry business. Kansas in the main, is a dry state, and is favored with cloudless skies to a large extent in the make up of her meteorology. Two hundred good heavy turkeys of the strain recommended, means at Thanksgiving to Christmas \$200 to the fortunate possessor. The dry prairie and extensive stubble fields of Kansas seem to offer peculiar advantages for successfully pursuing the business by very many farmers. If kept till January, the birds can be dressed and shipped long distances, and are always found to be ready sale and a cash article. \$200 more or less, as the ambition and ability of the enterprising breeder might determine, would be a considerable acquisition to the cash receipts of a Kansas farmer, and might be made in breeding a drove of large bronze turkeys, with a considerable degree of certainty. The insect food afforded by the free range of the prairies would usually prove abundant to supply the meat variety of food which the birds demand to make a vigorous and healthy growth, while the abundance of cheap corn at the command of every farmer, would supply the substantial grain food requisite for forcing rapid growth and fattening for the market at its best season.

It will be remembered that "American Girl," whose letter in the FARMER giving an account of her success in turkey raising, and which has created considerable attention amongst our readers, failed until she adopted the plan of penning the young polts till the dew was off and on rainy days, which is laid down on the excellent authority of the Poultry World, as of primary importance, in preserving the health of the young birds till they have passed their babyhood days.

Kansas is famous as a stock-growing state, and its possibilities need not necessarily be confined to raising bullocks, sheep and swine. Many small farmers that have not the advantage of range sufficient to permit of their entering extensively into the production of large animals, but who could annually turn off a flock of turkeys that would materially add to the revenues of the farm. The first step necessary is to master thoroughly the theory, then procure a good stock to work, and put the knowledge previously acquired into practice. He is a wise man who does not despise the day of small things; and the proper attention to many seemingly small things about the farm helps to make a fat larder and plethoric purse.

Making the Manure Heap.

As the time of the penning of the stock draws near, it is well for the farmer to have his plans matured for the winter. Among the objects which should claim his early attention, and not the least important only is a proper disposition of the manure which constantly accumulates about the stables and yards. In the older states where the skinning process has been in operation a number of years, the manure heap is the one question of fundamental importance. The skinning process is in full operation on every farm in the new west where the manure is neglected and allowed to go to waste. This prodigal practice has brought thin soil and scanty crops as the heritage of the children whose father's wasted the substance of the land by allowing the manure to be bleached by the sun and leached by the rain. The manure of the stock yard and stable will always increase the yield in the corn crop, and improve the quality and multiply the quantity and force early ripening of wheat on all upland, and cause the sod on the grass field to thicken and the grass to come thick and fine. The garden and root patches should always be well supplied with fine stable manure, if thrifty vines and abundance of vegetables are expected. If the farmer saves his manure, the manure in turn will go far toward saving the farmer from his most dreaded ordeal, light crops, and total failures.

The best mode to manage the manure is perhaps that of piling it in a broad, flat heap, as it accumulates through the winter. Lay out your manure heap in a convenient spot where the stock can be kept from running over it. Make the bottom of the heap six feet wide, the length may correspond to the number of stock kept. Wheel or cart the manure from the yards and stables directly to the heap, and pile on the fresh supplies as fast as they accumulate. The stables should be cleansed daily, and that in the yards should be removed as often as once a week, the long litter being put aside and used to bed the stock, and the droppings and short stuff carried to the heap, which should be kept uniform in height and flat on top, with the sides sloping merely enough to keep the mass compact and the sides from crumbling down. Care must be had to keep the heap moist, and if there is not sufficient rain through the winter for this purpose water should be thrown on but not enough to cause it to leach through; and if inclined to heat too much settle the pile by tramping and firming it, so as to exclude too free circulation of air through it. If refuse salt can be had which costs a small sum in the neighborhood of packing houses, a little sprinkled through the heap as it is built up will aid in keeping it moist. Keep the heap moist, and fermentation will gradually proceed in the coldest weather, and the coarse material will be reduced to fine manure by spring, the bulk diminished by one-half and the whole pile be in the best condition for scattering over as a top dressing to wheat or grass land, or using on the vegetable or corn ground. Saving the stock yard or stable manure is one of the elements of enlightened and

successful farming. By its own chemical action reduce it to the best and most convenient condition for immediate appropriation by all crops, and for handling.

Holstein Cattle.

We desire to call attention of our readers to the advertisement of Smith & Powell, published in the FARMER. These gentlemen are large importers of this superior Dutch dairy stock, which is becoming popular in this country. Last week we published a cut of their fine imported cow *Poreeleintje* (who ever can pronounce.) For style and milking qualities her equal will be difficult to find.

Lyman & Shaffer who are agents for the Cooley Creamer, an improvement in dairying which we have previously commended in the FARMER, for the state of Kansas, and whose headquarters are in Topeka, inform us that they are having most gratifying success in placing the creamer in the hands of farmers and dairymen in this state. An advertisement of the Cooley Creamer will be found in the FARMER, and we recommend its use as the most economical and convenient of any device yet invented for an ordinary farm dairy.

Report of the Kansas State Board of Agriculture.

The third quarterly report of the year, of the State Board of Agriculture, ending September 30th, has been issued, and like all of the reports, the product of the distinguished secretary to the board, Hon. Alfred Gray, the work is filled with useful information to the farmer, the prospector who meditates settling in the west, and to the general seeker after reliable information regarding the growth and prosperity of Kansas and the new west.

One of the most interesting and useful chapters in the present report is that on forest culture, and though somewhat lengthy, we make room in the FARMER for that portion which treats of preparation of the soil and planting. In future issues we will endeavor to find room for that part of the article which recommends varieties best adapted to soil and climate and other matters connected with timber culture on the prairies.

IMPORTANCE OF FOREST-TREE CULTURE.

While it would seem too late in the material development of the west to urge upon the attention of any one the importance of forest-tree culture, yet there are those who have developed valuable farms without planting during all this time, a solitary shade or fruit tree. It is to the attention of this class that the following summary of important reasons are presented in favor of forest-tree culture:

1. Shelter-belts for the protection of field crops, orchards, nurseries, farm animals and home surroundings.

The great importance of shelter-belts for stock in Kansas can readily be appreciated by every farmer who has observed his herds frantically rushing to protected localities, such as groves, the leeward of stone fences and bluffs, even at the approach of a storm during the fall or winter months. What feeder of cattle is there, whose object is to secure the greatest amount of fat for the amount of corn consumed, who would not pay a great deal more for a farm with ample protection than for one open and bleak, where the merciless winds search every nook and corner, requiring the entire consumption of feed for the stock to "hold their own," much less to give returns in the accumulation of flesh?

Orchards and nurseries especially need protection; in the absence of which, young trees are planted so as to lean westerly or south-westerly, and also pruned low, so as to better resist the withering effects of the winds, and to prevent the greatest damage to which young orchards are subjected—the chafing at the collar or at the top of the ground—injuring the vitality of the tree, and rendering it at once a prey to the rascally borers, which are seldom found in perfectly healthy trees. In inanimate as well as animate life, parasites are found when vitality is below par. While there are exceptions, this is the rule.

So far as field products are concerned, look at the effect of the unbroken winds in whipping off the blades of corn, and often breaking it to the ground. If at earing time, the damage is often very great. Observe the effect upon the vast fields of small grains, beating down and entangling them, and thereby causing the kernel in most cases to shrink, as well as making it impossible to harvest it, except with the old-time cradle or sickle. It is admitted on the part of all observing farmers, that the most serious drawback to wheat-growing—especially in the middle and western portion of the organized counties—is the disastrous effect of winter drouth, caused by the soil being blown off from the roots. In the wheat-belt in the central portion of the state—traversing the state from northeast to southwest—to the leeward of board and rail-fences we have seen drifts of dry soil, for miles at a time, from ten to fifteen inches in depth. Who can estimate the annual loss to the wheat crop alone for the want of forest-tree protection?

In the matter of home surroundings, comfort, beauty and utility are happily blended in the protection afforded by forest groves. The same might be said of all the roads in the thickly-settled portions of the state leading to the principal towns, if they were lined with forest trees or hedged with osage orange.

2. Climatic changes, such as increasing rainfall, retention of moisture, modification of temperature, making the atmosphere warmer during the dormant and cooler during the growing seasons:

3. Encouragement of insectivorous birds, which are of incalculable benefit to farmers and horticulture in the destruction of noxious insects, and as shelter to game.

4. The production of timber for farm economy, such as fencing-posts, stakes, fuel, etc., as well as hedges for fences and shelter.

5. Timber for commercial purposes, such as railroad ties, telegraph poles, building, bridges, manufacturing, etc.

6. Timber adds to the value of the farm, annually, probably more than any other one improvement that can be named.

SELECTION OF GROUND.

This is largely arbitrary, as the planting in most cases has to conform to the wants of the farm; thus, hedges must traverse exterior lines, with cross-fences to conform to previously matured plans. Shelter-belts for the protection of buildings must be so planted as to protect such buildings wherever located, and groves may conform to suit the fancy of the owner, or may be controlled by location of springs, or other running streams; but the varieties which are best adapted to these different locations will have to conform to the soil best adapted to the peculiar growth of each. Thus, the red cedar will take kindly to the soil along the bluffs and rough hillsides, while the cottonwood would do best in the bottoms below, although it will grow almost anywhere and under almost any circumstances. There are varieties that will thrive well on any good corn land, of which mention will be made under the head of "Varieties."

PREPARATION OF THE SOIL.

It may seem presumptuous to farmers for us to even suggest the necessity of thorough subduing and preparation of the soil for the reception of seed, cuttings and young trees; but when we find forest trees and even orchards planted in the prairie sod at a cost for digging post-holes for the same exceeding the expense of breaking and thoroughly subduing the raw prairie, a little advice seems necessary in some cases. It is economy of both time and labor to thoroughly plow and harrow the ground, and lay off as for corn with a plow, either in drills for wide planting, or in squares or cross-furrows for closer setting of trees. At the crossing of the furrows, there should be something of a hole made for some varieties, while others—the cottonwood, for instance—can be planted at the furrow-crossing without additional holes.

"PLANTING.—Large seeds, such as nuts and acorns, may be dropped and covered in the field, and some cuttings may be set at once in their stations; but most species are better grown in the nursery until large enough to transplant. This may require one, two or more years of preparation; but the transfer should not be deferred too long, as the expense of transplanting is thereby greatly increased. When planting young trees of some size, it is necessary to dig a hole with the spade, and great pains should be taken to apply the earth closely to the roots, and to pack it very firmly about them, so as to exclude the air. This is particularly recommended with young conifers. With pines, spruces, cedars, and most evergreens, it is believed to be better to defer planting until the buds have started, where we can control our operations.

"The planting out of a great many kinds of trees is a very simple affair, when the preparation of the soil has been thoroughly attended to. The spade is thrust down into the mellow earth and a cleft is opened, into which the root or cutting is placed; withdrawing the spade and reversing its face it is again thrust down, a few inches from the first cut, and pushed toward the plant, thus compressing the soil against the roots. When we have to do with the more valuable kinds of trees, however, especially evergreens, and larches (unworthy of cultivation in Kansas), and all kinds of a larger size, holes must be dug, the trees must be set by hand, bringing the earth upon and among the roots, and then tramping it closely about them, as already advised.

"When handling the young plants, the workmen should be very careful to keep the roots from becoming dry. This is especially requisite with the resinous trees, and with the magnoliaceae, such as the tulip poplar. Keep the roots covered with soil in the field, taking out only a few at a time, which may be wrapped in a damp cloth until wanted by the planter. With many of the more hardy sorts, such as the cottonwoods and soft maples, a very primitive and inexpensive plan has been adopted by our western planters. After marking out the little trees are laid along with their roots in the fresh furrow, and at once covered with the plow, after which the whole land may be rolled. Of course the trees will not be erect, but this makes little difference, for vigorous shoots will spring up from near the collar, making straight, upright stems the first season, after which the old stems may be removed, or allowed to smother and die out. Young cottonwoods may be found on almost any sand-bar in your rivers, whence thousands may be easily drawn in the early spring with little labor."

(To be continued next week.)

BELOIT, Mitchell Co., Nov. 20.—Fine rain. Happy people. Corn 25 cents per bushel. Winter wheat looks fine. A great many poor horses. Mitchell county votes \$30,000 railroad bonds and rests. Farmers more hopeful than for years; cause, fair price for wheat and corn. C. P. STEVENS.

SEDGWICK, Harvey Co., Nov. 21.—I notice in the issue of the 19th some queries in relation to the jointing of winter wheat in the fall. I have seen winter wheat here get knee high in the fall and make a first-rate crop the following season without cutting or meddling with. I have sown winter wheat here the 10th of August and threshed 19 bushels to the acre from that crop. I have sown winter wheat in the

spring and it would not grow large enough to make good pasture. In short, as the result of my experience and observation, I do not believe winter wheat will joint, so as to injure its subsequent production, in the fall; it must have a definite amount of cold and frost to make it productive, and this amount it is not likely to get in the fall, without retarding its growth to such an extent as not to injure its subsequent maturity and productiveness. As a result of my theory and belief, I sow as early in the fall as I can get my ground ready.

Corn is plenty in our market at 21 cents per bushel; hogs at \$2.90 per cwt.; oats at 25 cents per bushel. Wheat a little down. More wheat has been sown this fall than last, and at this writing it looks better than for 10 years previous.

Black-leg is among some herds of cattle here and is quite fatal. This is its first appearance in this vicinity. M. D.

OLIVET, Osage Co., Nov. 17.—I subscribe for the FARMER because I have read it for several years and it pays. The sheep interest is growing in this county. I wish to know if it pays to breed from black ewes. Have lately bought and read a new and approved book on Sheep Husbandry, but find nothing there about it.

Last week we had a soaking rain and the wheat is a sight to see.

Cattle, sheep, hogs, horses, mules, and even turkeys, geese and hens are on the "boom," as well as business of all sorts. Time sales of farmers outfits are frequent, and prices are wild and pay day sure.

A late FARMER had a few lines about how to move bees at any time any distance that if true benefits me more than the price of the paper for a year, as I want to move mine about 30 rods. A board before the entrance after moving so that they will mark their new home and not return to the old stand saves much trouble. GEORGE PHINNEY.

FENWICK, Republic Co., Nov. 10.—In 1863 I was engaged in farming in Clinton county, Ohio, and having raised a batch of early potatoes, which matured in July, I gathered them and prepared the ground for turnips. Many of my neighbors had already sown. As the season was quite dry I concluded to wait for rain. On the 10th of August I heard the rumbling of distant thunder, and was soon convinced that we would have a fine rain. I ran out and sowed my turnip seed and hurried for shelter. The rain thoroughly beat the seeds into the ground, and the result was a fine crop, while my neighbors had none. A neighbor passing and seeing my turnips, inquired the date of sowing, which was given him. "Well," said he, "I have sown turnip seeds on the 8th of June, the 4th and 25th of July, when they say they will come, wet or dry, and I never could raise any. Now I intend to sow next time on the 10th of August." However, when he left I think he believed more in a season than upon date of sowing to produce a crop.

During my stay in Ohio, which was six years, crops of various kinds failed in different localities. Notwithstanding, I heard numbers there speak of failures of crops in Kansas, as though Kansas was the only place of failure. I am satisfied that crops of all kinds will grow as well in Kansas as in Ohio.

The osage orange seems to do well throughout the state, as far as tried, for fencing, and in a few more years we will have many miles of it in this county, if properly cared for, that will be sufficient to turn stock.

I notice various letters, in the FARMER, from different localities. All seem to write as though they thought they were in the best county in the state. However, I think that I have been in about eighteen counties, and the soil thus far differs very little, and is more evenly alike all over than any state I have ever been in. I am situated about seven miles from Clyde, a thriving railroad town. The Central Branch U. P. railroad, and also the Junction City & Ft. Carney railroad pass through it. I think it will become the central trading point for a large portion of country. It has one steam flouring mill, two hardware stores, about seven dry goods and several grocery stores.

Pork has been selling in Clyde, in the last few days, at \$3; corn, 22c; buckwheat, \$1; potatoes, 75c; butter, 15c; rye, 50c; 50c; cabbage, 4c; fencing lumber, \$25. Wages, \$10 to \$12 per month, among farmers.

There has been more sickness and deaths this fall than ever before in double the length of time; but the sickness has passed away and the usual degree of health restored.

The early-sown fall grain looks better than I have ever seen anywhere; some late sown not up yet. Acreage in this locality double that of last year.

Some farmers in this section, I think, will make bacon of their pork, finding it paid well last year. D. DORAN.

TOPEKA, Shawnee Co., Nov. 10.—Mr. Editor, you appear to be quite an enthusiast in regard to bee culture in Kansas. Now I have always regarded bee-keeping here anything but profitable. At least I have not been able to get enough surplus from two or three hives to remind me of the good old times in Illinois, when we used to take forty or fifty pounds from a hive. I think friend O'Neil, of Black Jack, might enlighten us some, as I see he made a fine display of honey at the Douglas county fair a year ago. What his management is I cannot say, but he certainly made a good display, and I should like to hear from him through the FARMER.

As milk and honey go well together, I will make a transit from bees to cows. Our cows commenced failing very much in quantity and quality of milk, about the time of the first frost, some two weeks ago. We commenced feeding them a little extra, and were well paid, as they increased at least fifty per cent. in quantity and as much in quality, as the milk is a richer color and the taste of the butter far superior to what it was. We are feeding meal and bran mixed, about half-and-half, four quarts to each cow, night and morning, beside the usual feed of hay or fodder; but recollect, you cannot make good butter without good water for your cows.

I received, a few days ago, from A. Hofer & Sons, a little pamphlet on grape-growing, that is well worth reading, as it advocates an entirely new method in planting, and the rules laid down for culture and trimming, are very plain and simple, so much so that any person, by reading this little work, can trim a vine understandingly, which is more than I can say for some writers, after reading their manuals. W. P. POPPENOE.

The Kansas FARMER publishes bee literature from the freshest sources of supply, as it aims to in every department of agriculture, but does not aim to be specially enthusiastic in the

W. B. All imported and pure native bred an-

Here is your fine stock farm, 480 acres, bottom and upland, 35 acres under cultivation and fenced; good frame house 18x28, two stories and kitchen, 5 rooms, good corn crib and well and never failing stream of water through the place; plenty of timber; near schools and post office, 8 miles from Topeka. Price \$12 per acre.

75 acre farm, 10 miles from Topeka; upland and bottom, 60 acres under cultivation, all fenced; stone house with basement, 4 rooms and cellar; stone corral covered with hay, good well and running water; 1 mile to school house; 2 miles to post office, 6 miles to R. R. station. Price \$1800, cash and time; a good orchard.

110 acre farm, hazel brush land, 65 acres under cultivation, 30 acres timber, 25 acres pasture; all fenced, mostly board, log house, well watered, in good neighborhood, near school and postoffice; 3 miles from Eudora station, A. T. & S. F. R. R., Douglas Co. Price \$2200.

80 acre farm, 2 miles from Wakarusa station, bottom and second bottom; 50 acres timber, 50 acres fenced, 250 to 300 rods stone wall, balance post and rail; good frame house, stone stable, hay roof; log cow shed, shingle roof, good spring at house and Wakarusa runs through place; good orchard, good corn crib, 2 acre stone corral for hogs with living water, good neighborhood, near schools and postoffice, and a No. 1 farm. You want to come soon and see us, as we are bound to sell. Price only \$2000, cash.

80 acre farm, 5 miles from Topeka in good neighborhood. Rolling prairie; 1 mile from school, postoffice and station; 20 acres in cultivation, all fenced, hedge and wire; frame house 18x18, good cellar, good well, good orchard; good coal bank on place. Now this is a real bargain for some one who wants a small farm. Price \$2200.

Here is a nice little garden and fruit farm, only 2 miles from Topeka. 20 acres upland, black sandy loam, 8 acres timber; 12 acres fenced, board and post; frame house 16x28, 1 story, and addition 8x14; good frame barn, good well and two good springs; 40 bearing trees, apples, peaches, pears and cherries, and plenty of small fruit. Price \$1400.

80 acre farm, 8 miles from Topeka, most all bottom, black loam, hazel brush land. 40 acres under cultivation, about 15 acres timber; fenced, post and rail and board; double log house, log stable, good spring and well, few peach trees, 100 grape vines, good stock range. Price \$20 per acre.

30 acres bottom land, 1/2 mile east of city. 12 acres under cultivation, watered by Shunganunga creek. Will make a No. 1 garden farm. Can be bought at a bargain.

70 acre farm, 16 miles from Topeka. No. 1 prairie land, 40 acres under cultivation, some timber, all fenced; log house, frame stable, well at house, spring at barn. Small orchard, plenty of crabs, sheds and granaries and all necessary outbuildings; near school and postoffice, and a No. 1 farm. Price only \$2000.

80 acres land, four miles west of Topeka. Price \$600.

160 acres land with living water, 8 1/2 miles south of Topeka on A. T. & S. F. R. R., near station. Price \$1200.

510 acres land in southern part of Monmouth township. Price \$10 per acre.

160 acres of land 8 miles from Topeka, 2 1/2 miles from Pauline station A. T. & S. F. R. R. Price \$800, if taken soon.

160 acres land in Dover township, 2 1/2 miles east of Dover. Price \$1000.

480 acres land in southern part of Jackson county, 2 miles from Meriden station on A. T. & S. F. R. R. Price \$3000.

80 acres land in Auburn township, 1/2 mile north of Auburn. Price \$500.

160 acres land in Tecumseh township. Price \$8 per acre. Rolling prairie.

160 acres land in Marion county, 2 1/2 miles northwest of Durham Park. Price \$4 per acre.

180 acres land 4 miles south of Topeka. Price \$5 per acre.

160 acres land in Topeka township. Price \$20 per acre.

40 acres land near Topeka on the West and near river; make a nice suburban home. Price \$125 per acre.

160 acres land, Soldier township. Price \$500, cash and time. Must be sold.

160 acres land, Jefferson county, 1 1/2 miles from Rock creek station. Price \$1250.

160 acres land, Tecumseh township. Price \$600.

160 acres land 1 1/2 miles from Pauline station A. T. & S. F. R. R. Price \$2100.

1280 acres choice land with living water 7 miles north of Silver Lake; will make a No. 1 stock farm. \$10.50 per acre.

160 acres rolling prairie 4 1/2 miles west of Auburn; price \$640.

160 acres of rolling prairie, 5 1/2 miles west of Auburn. Price \$600.

160 acres choice land, bottom and prairie and timber; living water; 2 1/2 miles from Meriden station on A. T. & S. F. R. R. Price \$1200, cash and time.

160 acres nice level land, 7 miles south of Topeka near R. R. station. Price \$1000, cash and time.

160 acres rolling prairie, 7 miles from Topeka, mission township. Price \$600, cash and time.

320 acres land, rolling prairie, in Dover township. Price \$8 per acre.

320 acres land in Dover township; will sell cheap.

160 acres land 3 miles west of Topeka, near college. Price \$20 per acre.

160 acres of land 3 miles west of city and near Washburn college. Price \$20 per acre.

320 acres rolling prairie, living water, will make a nice farm; in Atchison county, 20 miles from Atchison, 2 1/2 miles from Edinburg, 6 miles from Nortonville, and near three railroads. Can be bought for \$8 per acre. Now this is a bargain. Near railroad center.

195 1/2 acres, bottom, timber and upland, in Dover township, near river. Price \$10 per acre, cash and time, or will trade for city property and pay difference.

160 acres choice prairie, 8 miles from Topeka in Monmouth township. Price \$1400.

160 acres prairie land, about 8 miles from Topeka in Monmouth township. Price \$1400.

160 acres choice land south of Topeka, near Pauline station, will make a No. 1 farm. Price \$3000.

160 acres prairie land; will make a nice home; only four miles from Topeka. Price \$20 per acre.

Here is a good bottom farm to trade for city property in Topeka, or will sell for cash and time; Jefferson county, 160 acres all bottom land, 30 acres timber cleared out and in blue grass, balance under cultivation, fenced in eight fields and lots with hedge, board and rail, 20 acres in timothy, 30 acres wheat, 8 acres clover and timothy, 15 acres in orchard grass, orchard of 100 bearing fruit trees, peach, apple, pear and cherry, good frame house of two stories, eight rooms, good cellar all finished in good shape, good well, Kan. gas river runs on south side, good stable for 6 cows and eight head horses, frame and log stable, 1/2 mile from Medina and 1 1/2 miles from Perry on the K. P. R. R. This is one of the best improved farms in Kansas; now is your time to make a big trade.

40 acre bottom farm all fenced, 30 acres under cultivation, 20 acres pasture, good frame house 12x16, 1 1/2 story addition 10x16, 1 story addition 12x16, one story with cellar, four rooms, good well, frame stable for six or eight horses, few fruit trees, four miles from Topeka; price \$1800; will trade for city property, also will trade stock and fixtures.

Our Exports of Fruit.

We are not only slowly increasing the production of oranges and bananas, and beginning to cure our own raisins and figs, and grow our own almonds and olives, but are enlarging our shipments of common fruits. Compare the figures of the fiscal year closed last June, with those of the previous year:

Apples dried.....	1878.	1879.
Apples, green or ripe.....	836,794	226,085
Other fruit, green, ripe or dried.....	582,415	382,261
Fruit preserved or canned.....	389,718	435,450
Total.....	\$1,916,979	\$1,378,196

The sale of dried fruit may be immensely increased, and with recent improvements in driers

the trade should grow with great rapidity. Home-raised fruits of equal value are unattainable by the working people of Europe, because beyond their means. Increase of price is the only bar to indefinite extension of trade.

The above statistics of the export trade in fruits have been collated by the *Tribune*, which contain much significance, and invite careful study by all who are about planting out orchards. Three-fourths of all the apples raised in the country have been heretofore virtually lost for the want of proper means for saving them. Green fruit is one of the most perishable products, and is very bulky and expensive to get to market. The improvements in drying have been so great that a large crop of fruit of good quality may be prepared in a manner that it is easily, cheaply and safely shipped to Europe, where a market is opening which promises to take all that this country can supply.

Breed From Pure Stock.—No. 1.

It is a known fact that cattle and hogs make dollars faster than anything else in this country (that is good stock of either) and it is strange what one or two crosses with thoroughbred stock on our common stock will make.

We hear of bull calves, with two or three crosses, selling for \$25, or \$30, to use in herds. This is one great mistake, for there is no certainty of what kind of calves you will get from such a bull; neither are they grading up their cattle fast enough. And right here let me say that hereafter I hope that in making out the premium lists for cattle at our different fairs, that they would compel those showing grade better to show pedigrees with not less than four crosses from thoroughbred bulls, making fifteen-sixteenths of whatever breed they should be. And as to hogs I should want them to be of pure blood of the different breeds.

What our farmers want is to look more after the kind of stock than to number. There is a growing demand for beef to ship to Europe, and they want good beef. We see by the markets that the prices for good and poor beef are getting wider and wider apart; so it is to our interest to improve our stock, for beef is the main stand-by in this western country.

But some say feed is cheap in Kansas. So it is; but it takes just as much time and trouble to take care of a poor animal as a good one, and with ordinary care a good one is much more profitable than a poor one; and one that does not take care of his stock had better go out of the business. How pitiable it looks to see a lot of poor, half-starved cattle in the latter part of winter, beside the worry and vexation it causes the owner, if he is even lucky enough to get them through the winter.

Short-horns are my choice of cattle. Take them for beauty, style and profit, both as to beef and milk, there is certainly no breed that surpasses them. They have stood the test for a number of years both in England and this country. They do admirably in Kansas. As a rule, they are very fine milkers; this I know to a certainty. They give more milk than our native cattle and make more and better butter. Go to their herds and see their calves; which is proof enough of my statement. Some will say, Oh, they will be worth no more than our common cattle in a few years. This is a great mistake. There will always be as much difference between Short-horns and native cattle as there is between native cattle and Texas steers; and there is just as much difference in handling them.

In conclusion, I would say use nothing but thoroughbred males on your stock. Buy at home of reliable men, by all means. Grade up your stock. It will be money in your pockets in the long run if it does cost a little in the start.

M. W.

Preparing Cuttings.

Before cold weather comes on, cuttings of gooseberry, currant, grape vine, cottonwood, willow—in fact anything that will grow from cuttings—should be prepared for spring. In case of vine cuttings, make them of short jointed wood, three eyes long. All others may be cut to a uniform length of about eight inches. Tie them in neat bunches of twenty-five or fifty, not tightly, placing the butts all one way. Stand them on their bottoms in a row and cover with earth, throwing it off them until a sharp ridge is formed. Thus they may stand until planting

time in the spring, when they may be placed in nursery rows, the cuttings six inches apart in the row, and kept clean. At the end of one or at most two years, they will be ready for transplanting where they are finally to stand. Thus prepared, we have had them nicely calloused by spring, and in some instances roots were ready to be formed.

In planting, the operator must be governed by the nature of the shoot. Grape cuttings should be set so that only one eye is above ground. Set other cuttings so that two eyes will appear above ground. In planting it is absolutely necessary that the earth should be quite firm about the lower part of the cutting. For this, as one reason, it is usual to set them somewhat slanting. Another advantage in favor of planting cuttings slantwise, is that they are supposed to root more freely than when planted vertically, and for the reason that thus a greater surface is exposed to the heat near the surface of the earth.

Keeping Winter Apples.

If apples are worth raising they are worth some care and labor to keep them. Every farmer who raises apples may have this fruit in using condition the whole year. The harvest apple, the early stawberry and the Carolina June come into service in the first half of July, and from that time till the first of January we have a supply of apples without much care. To furnish good fruit for the remaining six months requires some knowledge of the nature of apples, and a timely application of that knowledge. The first step is to select the best keeping varieties in our possession, and having done this, prepare barrels, or boxes of a convenient size to store the spring stock. The fresh fallen leaves furnish the best packing material, and in the country they can be had for the gathering, in any forest. If leaves are not convenient, finely cut straw is a good substitute. Carefully select your apples, rejecting all that are bruised, or in any way defective. Place a layer of leaves or cut straw in the bottom of the barrel or box—on this set a layer of apples side by side, and so proceed with alternately a layer of apples and packing. Head the barrel, or if it be a box, nail a tight cover on it, and the fruit is

ready for storing. Each variety should be marked on the cover of the package so that its contents may be known before opening.

A dry cellar is a good storage room, but apples thus packed will keep equally well in any dry, cool place. Freezing will not materially injure them. A spare mow in the barn, where they can be covered with straw is a good storage room.—*Indiana Fa. mer.*

Chew Jackson's best Sweet Navy tobacco.

Moving Bees.

The following essay was read at the National Bee-Keepers' Convention held at Chicago last month, and published in the *American Bee Journal*.

"The subject of moving bees is very important, though it has been overlooked or neglected by nearly all the writers on bee-culture. Quite often we desire to move our bees a few feet or rods, and as it is the nature of bees after they have once marked the locality of the hive to return to that particular spot, even after the hive is moved away, it becomes necessary to adopt some plan that will prevent them from returning to the place from which the hive has been slaughtered early, as in some European countries, the disease has not spread; but where months have elapsed before measures have been adopted, it has insinuated itself into many parts of the country, and has proved most destructive.

"I feel constrained to repeat that the immense losses among live stock in this country is greatly to be accounted for in the absence of a sufficient number of men who have been thoroughly and scientifically educated in this branch of medical science. That the great multitude of intelligent farmers and live-stock owners in America should be obliged to contend with quacks and charlatans of the lowest description, while all other civilized nations (some of them as far back as a hundred years ago) have been provided by their governments with amply endowed veterinary colleges, is beyond all sound reasoning—is, in fact, nothing less than a national disgrace, and justly merits the derision of other nations."



A View of the Lands lying North-East of Cross Creek, looking north and north-west from the center of Section 8, Township 9, Range 13, showing "Slope Land," "Slightly Rolling Prairie," and "Rolling Prairie. ROSS & McCLINTOCK, Agents.



View in Mill Creek Valley, looking south over Thayer's Harvest Field, from Section 15, Township 11, Range 12. ROSS & McCLINTOCK, Agents.



A View of several miles to the north and north-west, looking up Spring Creek, from Michael's Farm, on Section 21, Township 11, Range 11, showing long, easy slopes in front, and high rolling and somewhat broken land to the right and in the distance. ROSS & McCLINTOCK, Agents.

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A farm in Jackson county, 50 acres under cultivation, plenty
of, wire and hedge; good stock range. Price \$1050.



Harrison Street School, Tonka.

At Milking Time.

At milking time we do not want so much talking and running around the "pound" or yard. We want all those who are not milking to either stay away or to act quietly and sensibly. We do not want the cattle chased all around the yard with a stalk or a heavy stick until they are "tired enough to stand still now, are you?" But by being uniformly kind we want each cow to know that we come to relieve her of her milk, which we intend to do quietly and quickly. We want her to understand we are her best friend and never intend on injuring her in any way. By having only quiet, experienced milkers you will, reader, be surprised at the great difference in the daily yield of milk.

It is scarcely necessary to caution cleanliness at milking time, for all should know its great importance, but we must speak of the habit of moistening the cows' teats to make the milking easier. This may be the case, but when this is persisted in the teats are apt to harden and crack. The best plan is to sponge them off just before milking with pure water—warm in winter, cool in summer—and when they have dried off, do the milking and the teats will always be nice.

The Next Census.

It is of vital importance that every household and every one having care of a farm, should become familiar with the requirements of the census law, and the importance of having the census taken as nearly correct as possible. All the information should be made public by the agricultural press. A circular published by Superintendent of Census, F. A. Walker, contains much information valuable to farmers.

By the act approved March 3d, 1879, it is provided that the tenth census shall be taken and completed during the month of June, 1880. This provision greatly reduces the liability to error which has been noted.

As the enumeration commences on the first of June, and closes on or before the thirtieth, all the crops which are gathered once a year will fall pretty clearly on the one side or the other of the dividing line.

Thus the cotton crop reported in the census will be that of 1879, gathered in the fall of that year; while the wool clip, or "wool crop," will be that of the spring of 1880—except in portions of California and Texas, where both a fall and spring clip are secured.

For certain of the productions of agriculture, however, there is no harvest, in the usual sense of that term; but the product is gathered week by week, or day by day, as it matures—milk, butter, cheese and meat, fall into this class.

In view of the requirements of the law, and of the great importance of accurate statistical information relative to agriculture, it is deemed to be highly desirable that farmers should prepare themselves in advance to give the information with promptness and accuracy. It is urgently recommended, therefore, that agricultural journals and the officers of agricultural societies and clubs give publicity to this announcement, and that all persons engaged in agriculture who shall receive this circular, or shall see it in the public prints, make note from time to time of the quantities of their several crops gathered, and the number of acres of land planted, in order that their statements, when made to the enumerators, may be of the highest possible value.

To remove any doubt that may arise concerning the crops to be returned in the census, the following table presents the several crops specifically mentioned in the agricultural schedule arranged according as they fall into the calendar year, or that of 1880, or are to be returned for the twelve months, beginning June 1st, 1879, and closing May 31st, 1880:

Productions of Agriculture During the Year Ended June 1st, 1880.

I.—OF THE CROP OF THE CALENDAR YEAR, 1879.
Wheat, acres, bushels. Corn, acres, bushels. Rye, acres, bushels. Oats, acres, bushels. Barley, acres, bushels. Buckwheat, acres, bushels. Peas and beans, bushels. Rice, acres, pounds. Tobacco, acres, pounds. Orchards, acres, value products, dollars. Vineyards, acres, value products, dollars. Small fruits, acres, value products, dollars. Hay, acres, tons. Clover seed and grass seed, bushels. Flax, acres, pounds. Hemp, acres, tons. Flax, acres, pounds. Flaxseed, bushels. Bees, No. hives, pounds wax and honey. Sugar cane, hds. sugar, lbs. molasses. Sorghum, acres, pounds sugar, lbs. molasses.

II.—OF THE CROP OF THE CALENDAR YEAR, 1880.
Wool, No. fleeces, pounds. Maple sugar, pounds. Maple molasses, gallons. Value of home manufactures, dollars.

III.—OF THE YIELD OF THE TWELVE MONTHS, JUNE 1, 1879, TO MAY 31, 1880.

Butter, pounds. Cheese, pounds. Milk sold, gallons. Market gardens, acres, value products, dollars. Value of animals slaughtered, dollars. Value of forest products, dollars. Value of home manufactures, dollars.

Sheep's Pluck.

Cut the liver and lights in thin slices and put them in a big dish or jar, with layers of sliced potato and onion, chopped sage and herbs, pepper and salt. A few slices of bacon may be added. Cover with a thin piece of suet or with greased paper and bake one and a half hours. Where there is no oven this may be stewed.

A German forest-keeper, eighty-two years old, who "does not wish to carry to the grave with him an important secret," tells *The Leipzig Journal* that during the past half century he has saved several men and a number of animals from the horrible death of hydrophobia by simply bathing the bitten surface as soon as possible with warm vinegar and water, and when this has dried pouring on a few drops of muriatic acid.

THE STRAY LIST.

HOW TO POST A STRAY

BY AN ACT of the Legislature, approved Feb. 27, 1866, section 1, when the owner of a stray horse or other animal, 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 price of value, and the name and residence of the taker up, to the County Clerk, together with the sum of fifty cents for each animal contained in said notice.

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 fails for ten days, after being notified in writing of the fact, any other citizen and householders may take up the same.

Any person taking up an estray, 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 sell it to any person, and that he has advertised it for ten days, that the market and brands have not been altered, and 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 Justice delivered to the owner, on the order of the Justice, and upon the payment of 1 charge and costs.

If the owner of a stray fails to prove ownership within twelve months after the time of taking up, 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 the householder to appear and appraise said 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, 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.

Fees as follows:

To taker-up, for each horse, mule or ass, \$.50

To County Clerk, for recording each certificate and forwarding to KANSAS FARMER, .25

To Kansas Farmer, for publication as above mentioned, for each animal valued at more than \$10, .50

Justice of the Peace for each affidavit of taker-up for making out certificate of appraisement and all his services in connection therewith, .25

Strays for the week ending November 26.

Allen County—T. S. Stover, Clerk.

MULE—Taken up by J. O. Hollenstein, Humboldt tp, one black mare, 14 hands high, collar marks on top of neck, light colored nose, about 6 years old. Valued at \$50.

HORSE—Taken up by Wm. Culbertson, Manhattan tp, one bay horse with 2 white hind feet, 1 white fore foot, white spot on left side of nose, about 5 years old. Valued at \$20.

PONY—Taken up by Hiram Lawrence, Oange tp, one black horse pony, about 4 years old, ordinary size, branded on the left shoulder with the letter "H", on the right with "P", other indistinct brands on the neck, middle marks.

FILLY—Also by the same owner, one bay filly about 3 years old, 15 1/2 hands high, branded on the left shoulder with the letter "V", star in forehead.

PONY—Taken up by G. G. Hayward, Humboldt tp, one brown stud pony with gold face, both left feet white.

Anderson County—J. W. Goltra, Clerk.

MULE—Taken up by Charles and Norton Reynolds, of Rich tp, November 5, one black mare mule with white collar marks on both sides of the neck, and other harness marks, a meaty nose, supposed to be 8 or 9 years old. Valued at \$80.

PONY—Taken up by Delos Walker, Walker tp, October 24, one blue mare pony, 8 years old, hind feet white, 1 glass eye and blaze face, no marks nor brands. Valued at \$20.

Brown County—Henry Isely, Clerk.

STEER—Taken up by Joseph Fisher, Morrill tp, Sept 18, one dark brown horse pony, branded on the left side of the neck, on the right shoulder, about 12 years old, dim brand on left hip.

STEER—Also by same, one spotted steer, about 1 year old, dim brand on left hip.

Douglas County—B. F. Diggs, Clerk.

STEER—Taken up by S. R. Becox, Marion tp, Nov. 1, one yearling steer, white in face, white on legs and tail, the rest red, no marks nor brands. Valued at \$15.

STEER—Taken up by Lydia A. Roy, Marion tp, Nov. 4, one red steer, 1 year old, white strip between the horns down the nose, white on each flank, right hind foot white, no marks nor brands. Valued at \$25.

HEIFER—Taken up by Silas Dodder, Marion tp, Nov. 1, one 2-year-old, red heifer, branded in forehead, white on belly, no marks nor brands. Valued at \$15.

COW—Taken up by Thomas Anderson, Kannaoka tp, Nov. 2, one white cow, 6 or 7 years old, little red inside the ears, no marks nor brands. Valued at \$15.

HORSE—Taken up by Benjamin Hunt, Kannaoka tp, Oct. 23, one dark bay horse, about 9 years old, branded in forehead, left hind foot white, a bunch on the right hind leg, around. Valued at \$25.

HORSE—Taken up by E. Workman, Painterhood tp, Oct. 23, one iron-grey horse, 15 1/2 hands high, collar marks. Valued at \$35.

PONY—Taken up by S. R. Starr, Wildcat tp, Oct. 25, one light-brown mare pony, head white below the eyes, one glass eye, legs white below the knees, shod all around, and about 11 years old, has saddle marks. Valued at \$20.

CONTINUED ON PAGE 388.

WALNUTS! WALNUTS!

KANSAS LAND OWNERS

Raise Walnut Timber.

It is becoming scarcer and dearer each year, and will make your lands very valuable some day.

We will furnish walnuts for planting while our stock lasts at 60 cts.

per bushel packages included; cash with the order.

TRUMBULL, REYNOLDS & ALLEN,

SEEDSMEN,

Kansas City, Missouri.

PUBLICATION NOTICE.

State of Kansas) ss
County of Shawnee)

In the District Court in and for the county and state aforesaid.

F. B. RIX, Plaintiff,

vs.

John Cox, Defendant.

John Cox the defendant in the above entitled action will take notice that he has been sued by F. B. Rix, the plaintiff therein, who did on the 24th day of October, 1879 file his petition in the District Court, in and for the county of Shawnee and state of Kansas, against John Cox, the defendant, and that the defendant must answer the petition on or before the 10th day of December, 1879, or said petition will be taken as true and judgment rendered accordingly. The nature of the action for which judgment is asked is to recover the sum of \$200 with interest at 12 per cent per annum since May 21st, 1874 together with protest fees taxed at \$2.02, the amount being due on a promissory note executed by J. B. Fisher and made payable to the order of the defendant, who endorsed and delivered the same to Chas. N. Rix, who afterwards sold, assigned and transferred his interest in and to said note to the plaintiff. And the defendant is further notified, that at the time of filing said petition an order of attachment was issued out of the Clerk's office of said court and levied upon lots numbered one hundred and twenty six and one hundred and twenty eight on sixth avenue west, in the City of Topeka, as the property of the defendant.

D. E. Sowers,
Attorney for plaintiff.

(SEAL) R. E. Heller, Clerk.

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

Ayer's Hair Vigor

FOR RESTORING GRAY HAIR TO ITS NATURAL VITALITY AND COLOR.



Advancing years, sickness, care, disappointment, and hereditary predisposition, all turn the hair gray, and either of them incline it to shed permanently. AYER'S HAIR VIGOR, by long and extensive use, has proven that it stops the falling of the hair immediately; often renews the growth; and always restores its color, when faded or gray. It stimulates the nutritive organs to healthy activity, and preserves both the hair and its beauty. Thus, the weak or sickly hair becomes glossy, pliable, and strengthened; lost hair regrows with lively expression; falling hair is checked and established; thin hair thickens; and faded or gray hair resumes their original color. Its operation is sure and harmless. It cures dandruff, heals all humors, and keeps the scalp, cool, clean and soft—under which conditions, diseases of the scalp are impossible.

As a dressing for ladies' hair, the Vigor is praised for its grateful and agreeable perfume, and valued for the soft lustre and richness of tone it imparts.

PREPARED BY DR. J. C. AYER & CO., Lowell, Massachusetts, Practical and Analytical Chemists.

SOLD BY ALL DRUGGISTS AND DEALERS IN MEDICINE.

THE BEST OF ALL LINIMENTS FOR MAN OR BEAST.

When a medicine has infallibly done its work in millions of cases for more than a third of a century; when it has reached every part of the world; when numerous families everywhere consider it the only safe reliance in case of pain or accident, it is pretty safe to call such a medicine

THE BEST OF ITS KIND.

This is the case with the Mexican Mustang Liniment. Every man brings intelligence of a valuable horse saved, the agony of an awful scald or burn subdued, the horrors of rheumatism overcome, and of a thousand and one other blessings and mercies performed by the old reliable Mexican Mustang Liniment.

All forms of outward disease are speedily cured by it.

MEXICAN

Mustang Liniment. It penetrates muscle, membrane and tissue, to the very bone, banishing pain and curing disease with a power never fails. It is a medicine, available everywhere, from the ranch to the city.

MUSTANG

over the solitary plains, to the inner land prince, and the woodcutter who seeks his food with the axe.

It cures Rheumatism when all other applications fail.

LINIMENT

speedily cures such ailments of the HUMAN FLESH as

Rheumatism, Swellings, Stiff Joints, Contracted Muscles, Burns and Scalds, Cuts, Bruises and Sprains, Poisonous Bites and Stings, Stiffness, Lameness, Old Sores, Ulcers, Frostbites, Chilblains, Sore Nipples, Caked Breasts, and Indolent every form of external disease.

It is the greatest remedy for the disorders and accidents to which the HUMAN CHAIRMAN is subject that has ever been known. It cures

Sprains, Swellings, Stiff Joints, Founder, Hoof Sore, Hoof Dis-eases, Foot Rot, Scalds, Scabs, Hollow Horns, Scalds, Wind-galls, Spavin, Farcy, Ringbone, Old Sores, Poll Evil, Film upon the Sight and every other ailment of the horse.

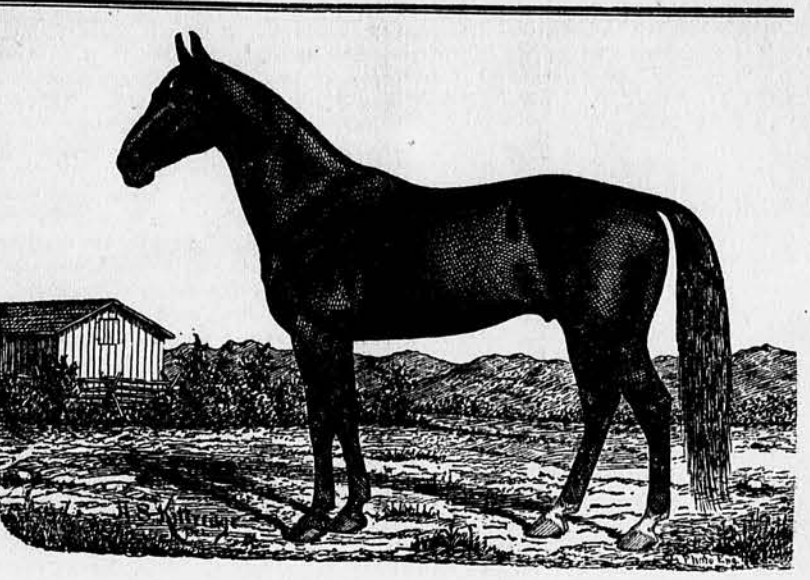
On which the occupation of the Stable and Stock Yard is liable.

A twenty five cent bottle of Mexican Mustang Liniment has often saved a valuable horse, a life on crutches, or years of torture.

It heals without a scar. It goes to the very root of the matter, penetrating even the bone.

It cures everybody, and disappoints no one. It has been in steady use for more than twenty-five years, and is positively

THE BEST OF ALL LINIMENTS FOR MAN OR BEAST.



Imported Clydesdales,

HAMBLETONIANS,

Also Trotting Stock, Cheap and on Easy Terms.

All Stock guaranteed to be as represented. Catalogues sent free. Address, POWELL BROS.

Springboro, Crawford Co., Pa.

SPECIAL OFFER.—To any one who subscribes now, and sends us \$1.75, we will send

the Companion free to January 1st, 1880, and give a full year's subscription from that date.



It aims to be a favorite in every family—looked for eagerly by the young folks, and read with interest by the older. Its purpose is to interest while it amuses; to be judicious, practical, sensible, and to have really permanent worth, while it attracts for the hour.

It is handsomely illustrated by the best artists, and has for its contributors some of the most attractive writers in the country. Among these are

Harriet Beecher Stowe, James T. Fields, E. P. Whipple, J. T. Froubridge, Dinah Muloch Craik, Rebecca Harding Davis, Sarah Winter Kellogg, James Martineau, Louise Chandler Moulton, Dr. Henry I. Bowditch, C. A. Stephens.

The variety and worth of its contents will make it a repository of the choicest literature; a library of tales, travels, adventure, history and biography; a "Companion" for the school, the study and the fireside. It will give

Serial Stories, Stories for Girls, Editorials on Current Events, Stirling Tales of Adventure, Two Hundred Short Stories, Letters of Foreign Travel, Valuable Papers on Health, Brilliant Sketches, Poems, Anecdotes and Incidents.

Subscription Price, \$1.75. Specimen copies sent free. Please mention in what paper you read this advertisement. Address YOUTH'S COMPANION, Boston, Mass

NOTICE.—It is a well known fact that all classes of goods have advanced from 10 to 50 per cent. since the opening of the Fall season. Montgomery Ward & Co., 227 and 229 Wabash Avenue, Chicago, Ill., are still selling goods at prices made in July, before the advance became general. Their stock is large enough to supply the demands. They will continue to sell goods at the old prices as long as they have or can obtain them. Now is the time to send them your orders. They sell all classes of goods required for personal or family use, at wholesale prices, in any quantity to suit the wants of the purchaser. The only house of the kind in America. For the convenience of their customers, Montgomery Ward & Co. send out a Descriptive Illustrated Price List of 144 pages, giving prices and descriptions of over 10,000 articles. Illustrated with over 1,000 cuts. Send for one of these Price Lists. It will enable you to purchase goods as well at your home as if you were at their store. Address, Montgomery Ward & Co., Chicago, Ill.

THE WESTERN RURAL, Chicago, Ill.

The Western Rural,

The Best, Most Largely Circulated, and the Leading Agricultural and Family Weekly Paper.

It is conducted by a Practical Farmer. It is ably edited in all its departments. It is aggressive, progressive and up to the times. Its agricultural information is the latest, and is always reliable. It is the

Only "Farmers' Organ,"

and the only consistent advocate of cheap transportation to the Lea Board, and just and equal local rail road freights.

We have brought THE WESTERN RURAL out in a complete new dress.

Special Reduction in Prices!

Our regular price heretofore has been \$2.00 per year. We have now reduced the price to \$1.65 per year.

To every farmer into whose hands this advertisement may fall, we make the following special offer:

For \$1.65 in advance, we will send you weekly the 52 numbers of THE WESTERN RURAL for 1880, and in addition, the remaining numbers of this year from the time we receive your money, FREE.

If you will subscribe yourself, and will induce one of your friends who is not now a subscriber to do likewise, we will send the two papers the above length of time for \$2.80; being \$1.40 each.

For a club of 8 subscribers at \$1.50 each (12.00) we will send you an extra copy free as above.

For each additional subscriber after you have sent us a club of 8 we will take \$1.30 net.

Send your name and P. O. address, and the names and addresses of your neighbors and friends, and we will send free samples to each.

Address,

THE WESTERN RURAL, Chicago, Ill.

THE YOUNG FOLKS' MONTHLY.

A Live, Sparkling, Illustrative Magazine for Boys and Girls and Other People with Young Hearts. Contains 32 large pages of illustrations and reading matter of that cheerful best calculated to amuse and instruct the young.

Price \$1.00 per year, or one month on trial for 10 cents.

We will send it one year free to the Boy or Girl who will get us two subscribers for THE WESTERN RURAL at \$1.65 each, or two new subscribers for the MONTHLY at \$1 each. Address,

MILTON GEORGE Publisher, Chicago, Ill

Farm Letters.

ORNO, Jewell Co., Nov. 17.—Our county is still gaining a share of the immigration, many preferring to pay a reasonable price for lands where towns, school houses and churches are near, than to endure the privations of the frontier where land can be had for a trifle. There is no doubt good land in many of the western counties, but in most places entirely deficient in timber, stone and water. The timber might be supplied in time, but stone and water nature alone can furnish.

The election in this county resulted in a republican victory. The democratic candidate for treasurer, previous to the election issued a circular offering to pay back to the county \$1,000 of his salary if elected. Many republicans voted for Hill, making Burns' (Rep.) majority only 158, while the sheriff (Rep.) had a plurality of 1100.

Corn is about 25 per cent below the average in quantity and quality and is in good demand at 16 cents. If farmers were not compelled to sell they would do much better by holding till spring. Many of the frontier counties will have to be supplied and quite a home demand for feeding purposes will make good prices.

Winter wheat is looking well, the recent rains having brought late sown wheat on sufficiently to be in good condition for winter.

Some farmers have sold their stock and farming tools at auction this fall on a years time. We have observed with some misgiving the disposition of our people to pay fancy prices for stock and other things offered and sold because they can buy on time.

W. S. THOMPSON.

LANSFORD, Atchison Co., Nov. 17.—We notice correspondence from different parts of the state but none from this county. I must say that the prospect for farmers in this section of the country is encouraging indeed. More wheat sown than usual and plenty of rainfall; in fact, sometimes in excess, and it has also been distributed rather evenly for the last four or five years, which has resulted in good crops with comparatively no insect pests. The prices have also been fair. The writer is well convinced by a long residence and by observation if it were not otherwise supported, that the now frequent and even distribution of rainfall, is largely due to the planting and cultivation of artificial groves and hedge fences, which are now surrounding our farms and dotting the landscape over in every direction with groves, which was once a desolate bleak prairie. Hence the planting and cultivation of forest trees should be encouraged, by agricultural societies, legislatures, or otherwise, as the frontier farmer cannot afford to encumber his land for the benefit of the state and wait 15 or 20 years for any returns, as we are satisfied by experience that a man cannot realize much out of a grove of hard wood under 20 years, hence there should be some incentive to plant such timber as ash, black walnut, mulberry, osage, hock locust, and other durable sorts. As all who have travelled over the state will readily admit that we are comparatively destitute of timber, and that we are rich in every other essential that goes to make up a great state, except in timber. We need it for houses, for fuel, for railroad ties, for farming utensils of every description, and for a thousand other purposes. But besides all this, the benefit it would be to the state in its climatic influence cannot be estimated. Besides inducing rainfall, it affords protection to man and beast from our gentle Kaw zephyrs which also would be less frequent, as has been well established when the ground is moist.

S. STONER.

RAY, Pawnee Co., Nov. 19.—Rain has at last come to Pawnee county to cheer the drooping hearts of the farmers. As is well known we have had a severe drought in southwestern Kansas and many farmers had become considerably discouraged. From observation and inquiry I think about two-thirds of the wheat sown has come up and is looking very fair, and we think the recent rains will set it all right for the winter. The remaining third, much of it has not come up, but we think there is a possibility of its making a start this fall, and should we have a favorable season in the spring it may amount to something. Some farmers are plowing and sowing wheat now, but we have but little faith in winter wheat sown in November.

We noticed in the FARMER of November 5th a communication from T. Baldwin in which he speaks of Egyptian corn as being the standard for this part of Kansas, and estimates the yield from 25 to 75 bushels per acre. I have had two years experience on a small scale in raising Egyptian corn. It will unquestionably stand a drought better than corn, and perhaps is adapted to this climate, but I think the yield given is simply an exaggeration. Under the most favorable circumstances I think it may yield 30 bushels to the acre, and I think 20 bushels will be a good crop, above the average. But we will have to trust to experience in raising this as in other crops to teach us its value.

Live hogs sell for \$2.50 per hundred pounds. Our merchants retail bacon at 12 cents per lb. Query, how much do middle men make?

ETHAN ALLEN, JR.

SENECA, Nemaha Co., Nov. 17.—In a former letter I spoke of Nemaha county as a grain-producing district, showing that all the cereals and grasses peculiarly adapted to the great northwestern states, can be easily and plentifully raised here. The resources of Nemaha county are of such a character, that as a stock-raising country she possesses all those elements which contribute to the success of those who make this branch of business their means of livelihood. I have no desire to pen a glib-edged article like many that I see in the much exaggerated literary productions of dealers in

real estate, from which one might easily draw the inference that any one might come here with a very few hundred dollars, invest the same in calves and confidently expect to become a millionaire in a very short time. While it is true that even this may be a possible result, yet it is much more certain not to be. Stock-raising as a means of livelihood, or as an avenue for investment, promises as much certainty of success here as elsewhere, but to accomplish this, intelligence, hard work and perseverance are invariably required even as much as capital. I write more especially for the benefit of a large class in the eastern states who have small farms, many of whom have large families of boys, but are unable to find employment for them on the old homesteads, and are looking fondly to the prairies of the west for homes where their fields of operation would be enlarged, and profitable employment secured for the boys at their own homes. To such men, the cheap lands of Kansas hold forth even greater inducements to those who would become stock-raisers than the grazing lands of Texas, Colorado, or Montana.

In the November number of Harper's Magazine, there is a very readable article upon "The Cattle Ranches of Colorado." In this article the writer gives the probable results, and speaks of the amount of capital required in that state. He says that \$5,000 is the smallest amount that would be advisable for one to commence operations with there, while \$120,000 is just about the amount one has to have lying loose in his breeches pocket to make him the fortunate (or unfortunate) possessor of a ranch in southern Colorado, with the requisite amount of cattle to stock the same.

The cheap lands of Nemaha county and the profits which may reasonably be expected from even a few cattle, well kept, hold out inducements to hard-working, energetic and intelligent farmers who can muster even one-half of the smallest amount named above. We will venture the assertion that \$2,500 judiciously expended will put the head of a family of three or four good, working boys in possession of enough land and stock, the care of which will give them all profitable employment, and place them where they may reasonably expect, in a very few years, to be surrounded with all those evidences of the real enjoyment of the blessings of our modern civilization, which places the American farmer of to-day so far above his fellow of any other class or age. We do not say it in any spirit of vain boasting, but simply as a self-evident fact, that the intelligent American farmer of to-day, who is what is properly termed "well fixed," has a larger amount of the elements of true happiness lying within his reach, than the agriculturists of any other nation under the sun.

In another letter I will endeavor to show how \$2,500 or more may be profitably invested in the business of stock-raising in Nemaha county, with a reasonable hope that the investor will find therein a sure reward for his capital and toil.

GEO. HAY.

GREAT BEND, Barton Co., Nov. 17.—We have lately had a glorious rain here, (fully two inches in all), and now farmers' faces have shortened about two inches, and they stand at least four inches higher in their boots; so it makes everybody grow taller as well as the wheat. It was remarkable how well the wheat was growing before the rain. There are those here who declare that wheat will grow and even ripen a crop without even a drop of rain. Be that as it may, everybody is glad to see the rain, and confident the crop will turn out better. I have seen fields where the ground was plowed and the grain put in with a drill, that stood about three inches high, with two or three blades to each plant, looking even and bright over the entire field, and all without a drop of rain since the plowing was done. In other, similar fields sown broadcast at the same time, the wheat was not yet up. There is very little broadcast seeding done in this county. The drill is indispensable. It puts the seed down to perennial moisture, at a depth of say three inches. About Ellinwood early fields cover the ground entirely, and stand about four inches high.

Sickness is abating considerably since the cool weather set in. No new cases of fever, I believe, and very few deaths. Our first snow fell this morning; not enough to whiten the ground.

DIBETA SIGMA.

HARVEYVILLE, Wabaunsee Co., Nov. 18.—We are having it wet enough now to make up for all the dry weather this year. In the past two weeks we have had several heavy rains that have raised the streams higher than they have been for more than a year. The wheat looks as well as we could ask, while some fields have to be pastured already on account of its tremendous growth. The acreage sown this fall was larger than usual. Very little corn has been gathered since the rains commenced, the ground being too wet. There is a very good crop of corn here, a full average, but now it is badly down and spoiling, with not more than two-thirds of the crop gathered.

There has been more inquiry for young stock this fall than ever before, and they have brought better prices than they have for ten years. The Manhattan, Alma & Burlingame railroad survey has been completed through this county, and the superintendent of construction wants to see it graded from Burlingame to Bismarck, on Mill creek, this winter. Immigrants are already looking for homes along the line of the road. Now is the time to secure cheap homes in this county, for land will never be offered so low as at present, after the railroad is built.

No disease among stock. Fruit trees of all kinds in good condition. Will "American Girl" please tell us how she managed to raise so many turkeys, as it is near Thanksgiving, and we only raised two from four old ones. SENECA.



"It feels like a ball of fire rolling up and down the chest," is a common expression among sufferers from indigestion. Then use

Tarrant's Seltzer Water.

get the system into a healthy condition, so that the digestive organs can do their legitimate work, and you won't be troubled after eating. Dyspepsia is the result of indigestion, and is a disease resulting from the torpid condition of the stomach, and this aperient carries off easily and pleasantly the cause, and this cures the disease.

SOLD BY ALL DRUGGISTS.

THE Weekly Capital.

The Dollar Family Newspaper.

Published at Topeka, Kansas, by

HUDSON & EWING.

The Weekly Capital, published at Topeka, Kansas, is sent postage paid, one year for one dollar. It contains latest general telegraphic news, news from the principal cities of the state, and contributed and selected news from every county in Kansas. The decisions of the Supreme Court, proceedings of State meetings, conventions and such general literary miscellany and local intelligence from the State Capital as to make it desirable in every family. Send One Dollar by registered letter or post office order, and receive the paper one year.

SPECIAL ANNOUNCEMENT.

From and after January 1st, 1890 the Capital will be enlarged to a 32 column paper. Subscriptions taken at any time for one year, and the paper discontinued at the end of the time for which it is paid for. Sample copy sent free of charge to any applicant. In sending money for the Weekly Capital, mention the name of this paper, and write address plainly.

HUDSON & EWING,

Topeka, Kansas.

VERY IMPORTANT TO SHEEP OWNERS.

The new (patented) Sheep Dip, Little's Chemical Fluid, is a powerful, non-toxic, and will not injure even the eyes of sheep. Kills red lice, ticks, scab insects, also ants, bed bugs and fleas on dogs. Cures gapes in chickens, improves growth and quality of wool. The first prize for wool given in London in June last, was awarded to wool from sheep that had been dipped in this fluid.

It is a Perfect Deodorizer and Disinfectant. Send stamp for prospectus and testimonials from Australia, New Zealand, South America, Buenos Ayres and South Africa to T. W. Lawford, (General Agent) Baltimore, Md. or to the following Agents wanted in every city and town. Terms liberal. Advantage over other dips is it moves perfectly in COLD water. 1 gallon makes 100 gallons of dip. Perfectly safe in cold weather.



Endorsed by over 10,000 School Teachers.

THE AMERICAN YOUNG FOLKS.

Published at Topeka, Kan.

Sent one year to any address for 50 cents.

WHY THIS PAPER IS PUBLISHED.

To make a successful journal we believe there must exist good reasons for its being established. There must be some appropriate field for it to occupy, some necessity for its existence which will be appreciated upon its appearance. There are a great many publications for boys and girls of all ages. Many of them are filled with harmful and vicious trash—bloody romantic tales that make heroes of cut-throats, outlaws, and thieves. On the other hand there are a few delightful publications for youths, beautifully illustrated, which contain only such readings as give young lives bright, healthy and hopeful aspirations. What, in our estimation, seemed to be lacking was a cheap paper for boys and girls, combining instruction, entertainment and rational amusement—a paper that could, from its low popular price, go into every home where it would be recognized as a helpful, useful, elevating influence. That is what we are endeavoring to make the AMERICAN YOUNG FOLKS. Not so full of lessons as to make it hard to read, nor so dull and prosy as to be uninteresting. We want to make it so full of stirring, healthy stories, of bright bits of fun, of entertaining dialogues, of puzzles, of games, of plays and games of a kind, that it will just suit every boy and girl all over our broad land. Another feature we are giving is Aunt Mary's jolly and practical practical practical geographical and mathematical nuts to crack, as well as the best post office department any paper ever had. Our selections for declamations and dialogues for 1899 will be the best ever given by any paper.

These are some of the reasons why we publish this paper, and because we occupy a field no other boy and girl's paper does, giving a large amount of good and useful reading and many beautiful pictures for very little money. That such a paper is appreciated by boys and girls by their letters, and by school teachers everywhere, hundreds of letters in our possession amply prove.

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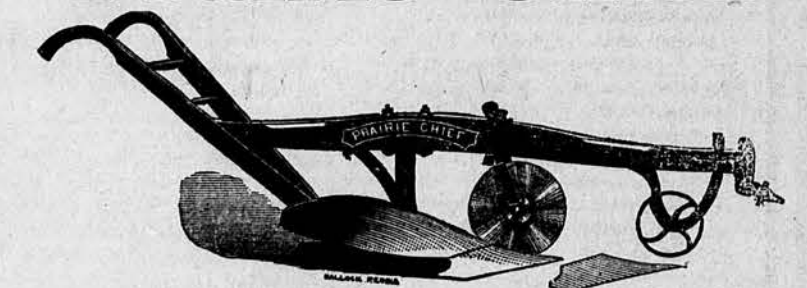
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