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THE KANSAS FARMER.

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Topeka, Kansas.

Horticulture.

The Grape.—Conditions Necessary for Success.

BY DR. J. STAYMAN, LEAVENWORTH, KAN.

In successful vineyard culture much depends upon the soil, location and climate, as may be seen in the quality of the fruit and wine from different districts and vineyards. In garden culture we have but little choice to make, for we have to plant our vines where our gardens are or do without them.

Although there is a difference in soil and location, yet the grape is adapted to a wider range of country than perhaps any other fruit. We have found it growing wild and bearing profusely on the river bottoms overflowed by the high spring and summer freshets, in the ravines and clefts of the rocks, on the gentle slopes, on the high hills and mountain ranges, variously exposed, in a humid and arid atmosphere, in the forests climbing the highest trees, in the groves and thickets running over the brambles and bushes, and on the border of the open prairie without any support except the tall grass.

What other fruit can we find growing wild so luxuriantly and bearing fruit so profusely over such a vast range of country and diversified soil and climate, as from Maine to California, and from Canada to the Gulf of Mexico? Indeed it may be said if any fruit is adapted to general cultivation it is the grape, seeing its natural extended range.

Although the grape is adapted to a diversified soil and climate, yet there is much difference found in the quality of the fruit depending upon local conditions, therefore we should select the most favorable situations we have.

Any soil that will grow wheat will grow grapes within the range of sufficient heat, but it should, however, be remembered that all locations are not adapted to the same species of varieties, as it requires a certain length of season to develop, mature and perfect each kind.

For garden culture, plant on dry, well drained soil, if you have such; if not, it will pay to drain it. If flat, elevate the ground about a foot high and six feet wide, and plant on the top of the elevation, in the usual manner, as if the ground had been naturally that high. Select an open exposure towards the east, south or west, if you have such, but if other conditions are favorable, any exposure will produce grapes abundantly.

While we admit garden culture successful in almost any soil or location, it is very different in vineyard culture, either for market or wine, for if we do not select a good location we cannot expect to compete with those who do, in either fruit or wine. A location that will produce good wine may produce good market fruit, but it does not always follow that a location for market will be equally good for wine; for early maturity, large size and beauty are more important and desirable for market than late maturity and fine quality. In selecting a situation for market, it is necessary that we are in close proximity to a good and permanent market. At such points we do not always have good locations, but where there is railroad or water facilities for transportation, fifty or even one hundred miles from market, with a superior location, would be preferable than near market with a medium location.

In planting with a view more especially for market, we should aim to have a warm situation, that our fruit will mature early, evenly and perfectly; for the earliest good fruit commands the highest price. Therefore a few days in advance will very much enhance the value of our crop, and this being a natural advantage, will soon pay for the best location and be a permanent value thereafter.

We should also guard against sudden and excessive changes of temperature, as they subject us to early and late frosts, which very much injure our crops.

By locating in proximity to large bodies of water we obviate excessive changes and are not subject to early and late frosts, therefore our crop is more certain, but it does not mature so early, and consequently is not so valuable for market. But if we select high elevations with east, south or west exposures, in proximity to deep and wide valleys, we both hasten the maturity of our fruit and guard against excessive

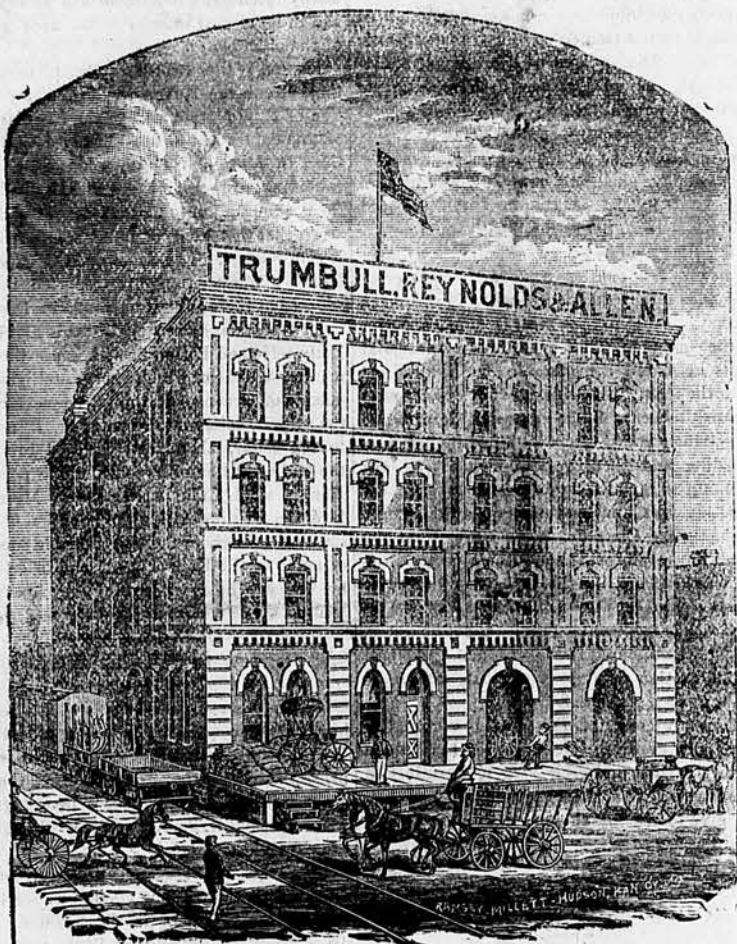
variations of temperature. That there are natural advantages in locations may be seen in the early maturity and superior quality of the same variety of fruit at different situations.

It is a well established fact that southern slopes of high hills, or elevated benches with a light soil, well drained, and clay subsoil, whether the surface is composed of humus, sandy loam, or calcareous earth, are the best locations, and if the soil is rich enough to produce good wheat it is sufficiently rich for

the richness and quality of the fruit depends upon the concentrated heat and dryness of the period from the commencement of seeding to maturity; that the Concord grape requires, from foliage to full maturity and perfection, about 9,000 degrees of heat.

To more fully illustrate these facts, we will give you examples of observations made at different elevations for a number of years.

We have the Concord grape growing on the low land and also on the bluff, about 200 feet



The Great Seed and Agricultural House of Trumbull, Reynolds & Allen, of Kansas City, Mo.

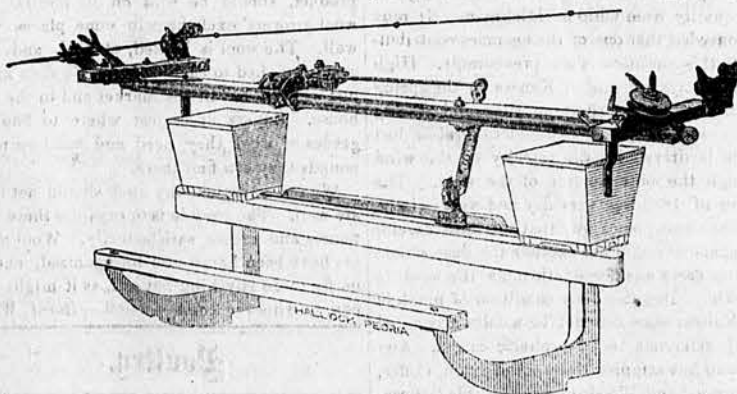
grapes, and that lime, marl, ashes, bone-dust and leaf mould are good fertilizers when the land is not rich enough. Very few locations in the west require such application, and a large proportion would be injured by so doing.

It may be expected by some that we will point out the best locations to produce good wine, but this subject embraces so many important conditions that we hardly feel able to do the subject justice in a short article like this. For it should be remembered, to make wine successfully and profitably, we should be able to compete not only with our neighborhood but also with the best wine districts of this country as well as Europe.

It may, however, be observed that it requires

above the other. On this bluff or elevation the Concord grape ripened eight to ten days earlier than below.

To ascertain the cause of this difference, we kept a thermometer at both places and observed the difference in temperature. We found a daily mean of three degrees, and at sunrise six degrees higher temperature on the bluff than below, which the following table will show. We give six years on the low land, from the time the grape foliated until its maturity, for the years indicated, also the mean temperature of the number of days to the time or date of maturity, with the sum total of the degrees of heat and number of inches of rainfall for the same period; also the average of the same.



THE BARNES WIRE CHECK ROWER.

a specific amount of heat to elaborate and develop a due proportion of sugar in the grape, and that whatever tends to the thorough ripening of our fruit will add to the strength, quality and aroma of our wine that the best conditions are warm soils and dry, elevated, sunny hill-sides in a temperate climate, within the zone of sufficient heat and diminished moisture, particularly from the seeding to the maturity of the grape. It may not be generally understood that the grape requires a mean temperature of 52 degrees before it foliates, and a definite amount of heat from thence to its maturity; that all the variations in ripening depend upon location and moisture, or, in other words, the difference in the ripening of the same variety depends upon the amount of heat, light and moisture the grape receives, and that

We also give three years on the bluff (the only years recorded) in like manner, and the average of the same. By comparing either the years or averages, it will be seen that the mean temperature was higher and the grape ripened nine days sooner on the bluff than below:

FROM FOLIATION TO MATURITY ON LOW LAND.					
Years.	Mean temp.	No. of days.	Sum of Time in heat.	Aug. rain.	Aug. temp.
1865,	67.9	133	9,072	15	21.00
1866,	67.2	135	9,519	20	23.33
1867,	67.1	134	9,044	17	20.34
1868,	68.	133	9,072	16	18.41
1869,	67.5	144	9,734	25	31.62
1870,	69.7	135	9,270	15	13.28
Average,	67.9	135	9,224	18	22.14
FROM FOLIATION TO MATURITY ON THE BLUFF.					
Years.	Mean temp.	No. of days.	Sum of Time in heat.	Aug. rain.	Aug. temp.
1865,	71.	127	9,070	8	15.61
1869,	70.5	122	9,353	15	31.62
1870,	72.	123	8,766	5	13.28
Average,	71.1	127	9,029	9	20.27

From the above table it will also be seen that in seasons of the greatest rainfall, it required more heat to mature the grape. Had the rain, wind and sunshine been the same, there would have been but little difference, if any, in the result.

While these results only show how the grape is affected by elevation, temperature, and rainfall, it does not show what effect they had on the quality of the grape. But by means of the saccharometer, or mark scale, we have fully demonstrated that on the bluff the grape contains 25 per cent. more sugar than below, which, to a gallon of wine, would be one-fourth of a pound; and the quality of the grape is also in proportion to the quantity of sugar it contains.

These facts fully show that there is a great difference in the quality of grapes and time of ripening at different locations, and that the locations in which they ripen soonest are in that proportion the best for either table or wine.

Correspondence.

Growing Catalpas from Seed.

Mr. E. W. Poor wants to know how I succeeded in growing catalpa seed. I will tell him by saying that I planted some in the fall in drills about three inches deep, but the wind blew them nearly all out. The few that were left were in wet ground and they came up early in the spring. That gave me courage, and I planted another lot in moist, rich land, and that still further encouraged me, and I planted the balance of my seed (this was about the first of May,) in rich, bottom land, close to where there was plenty of water. I soaked my seed and then made trenches three inches deep, took a pail of water in one hand and a tin cup in the other, and poured water along in the trench strewn the seed along in the trench, covered with garden rake, and they came up splendid. The best ones are now two feet high and as thick as a man's thumb. I consider the catalpa seed easy to grow.

I also planted soft maple seed, and they grew finely, but I watered them every other day and sometimes every day. I would advise any one wanting to grow seeds in a dry season, to select the best land and take the best of care of them. By this means I succeeded.

I also tried to grow sycamore seed, and tried every way I could think of, but failed every time. I can sprout them in a vessel, but when I put them in the ground they will die. I wish some one that has done it, would tell me how. I would like to raise them. They would be good to plant along the creeks. They make good firewood and grow fast, and make straight poles.

I would advise farmers that want to raise timber, to plant on their best land, that is, rich and moist, about creeks and ravines, where they cannot run a machine. There it no use trying to raise timber on dry upland; you only make food for the borer.

DANIEL GAUMER.

Torry, Saline Co., Kas., 96 miles west of Topeka.

Cottonwood Cuttings.

In THE FARMER of the 19th inst. I notice a letter from Mr. John Worth, of Belle Meade, asking for information in regard to cottonwood cuttings. I can give him my experience and observation, together with what I have learned of others.

In the early part of spring of 1876 I sent to the Missouri river for 1000 seedlings. They measured in bulk about two cubic feet. The plants were about 16 to 18 inches in length. As soon as I had them, I laid them in a trench and covered them over with dirt, leaving only the tops out. As soon as warm weather commenced (in May,) I planted them in rows from 3 to 4 feet apart, the rows are six feet apart running north and south. I have of the 1000 seedlings 3 such rows one quarter of a mile long. They are now from 15 to 20 feet tall and average 13 inches in circumference. They are real beauties, perfectly straight and smooth. The first year I had a row of corn between each row of trees and cultivated the trees and corn. The trees grew six feet tall the first year.

In March, 1877, before the sap started, my eldest son ten years of age, took from those young trees about 3,500 cuttings, which I tied in bunches of about 100 in each bunch, and placed them in a trench about one foot deep, 2 feet wide and 4 feet long, placing dirt between all the bunches and covered the butts well with dirt, as soon as the weather got warm they com-

menced sprouting roots beneath the dirt, and leaves above. I had the ground plowed and harrowed, and as soon as we had a good shower of warm rain, I took up those cuttings and sharpened the but ends and stuck them back in the ground in rows 8 and 10 inches deep, and the result was they started to grow immediately; and now they are a nice little grove, north of the cattle yard, forming a good wind break.

Willow and Lombardy poplar cuttings can be treated in the same manner with the same results. If the spring is backward, cold and dry, care should be taken and warm water should be poured on them once a week. Please remember not to plant until the cuttings have well started. Of all my seedlings and cuttings I do not think two dozen failed to grow.

C. H. ISELY,

P. S.—I may write something further on the subject as well as on tree and hedge culture.

C. H. I.

Canada Peas.

In your issue of January 19th, Mr. S. H. Downs, of Topeka, says he thinks the field pea can be grown any where in Kansas. I will amend by saying eastern Kansas, if he means the Canada field pea, and then fully endorse him. It delights in rich moist soil and perhaps the light, dry, sandy soil of some of the western counties would not suit it well. I have taken up this subject because I fear many farmers do not know what they lose by not growing the Canada pea. Nearly every one is fond of garden peas, and the Canada Blue is about as good as any of the early varieties.

I have raised it often in Kansas in the last 23 years. I will give my mode of cultivation and the result. Take any piece of land suitable for corn, either bottom or upland, rake of all the trash as early in the spring as the ground will work, sow early without plowing, about 25 pounds of peas in which 3 quarts of oats have been well mixed, then plough with a common 2-horse plow, covering deep, scatter manure and then harrow smooth. This is for one-fourth acre, do this two or three times at intervals of about three weeks, you will have abundance of green peas for self, neighbors, and for the market and dry ones either to feed or for sale.

Jack frost holds his grip well. Corn is not all harvested yet.

Farmers are becoming anxious about the wheat. There is not snow enough to be of any benefit and the ground is extremely dry. Stock is doing well and feed plenty yet.

H. P.

Buffalo, Wilson county.

Farm Experience—No. 4.

My wheat crop of 1877 was very good, and, like the previous season, was badly damaged by rain during harvest. My corn this season was a fair crop for upland; oats a failure. Last spring I bought and set 1000 apple grafts, and 660 nice trees was the result. This is the best and cheapest way for a person to get an orchard. Buy the grafts of some responsible nurseryman, the nearer your own locality the better; set the grafts 12 or 15 inches apart, and rows 4 feet apart. Cultivate thoroughly two years, then transplant, taking up all the roots if possible, leaving a few trees in the nursery to replant with what may fail to grow. My cotton wood cuttings I set 4 feet apart in the row, the rows 8 feet apart; the spring being dry did not get a good stand. The following spring plowed up and reset part, the trees not being thick enough to let stand.

1878 was a repetition of '77; too much rain in harvest, damaging the wheat badly; corn crop medium; oats good. This year we had plenty of peaches—the only peach crop we have had. From two trees set in the spring of '73 we gathered about one bushel of cherries, variety Early Richmond. My grapes have done well, yielding plenty of fruit for the number of vines. This is the only kind of fruit that I have made a success of fruiting—the only kind that has had fruit every year.

Wellington, Kas. G. W. B.

The following sales of Shorthorns will be held in 1881:

The Hamiltons, Kansas City, Mo., May 25, 26, 27 and 28.

Canada West Farm Stock Association, Waukegan, Ill., April 13.

T. Carwin Anderson, Mt. Sterling, Ky., July 27.

Van Meter & Hamilton, Winchester, Ky., July 28.

The Hamiltons, Mt. Sterling, Ky., July 29.

J. Ed. Sudduth, Stony Point, Ky., July 30.

H. Clay Hatchcraft, Paris, Ky., August 2.

The Farm and Stock.

Farm Notes.

LIVE WITHIN YOUR MEANS.

Fashion has created untold miseries, and it has done it in thousands of ways. It has been done by the better-to-do classes together with the poor honest laborer trying to compete with the rich in dress and an expensive table. There has been, and there always will be, thousands that will follow this practice, knowing that their noses will ever be held on the gritty space of the grind stone. Our young men and women come together to build up fortunes and to live happy, but in the majority of cases their lives end with a failure of success, from the fact they do not live within their means.

The American men and women try to move and accomplish everything they undertake from the impulse of the moment. The great mass of young men endeavor to start in life where some of their well-to-do fathers left off, after a lifetime of hard labor to save a little for a rainy day, and to keep the wolf from the door. It takes a lifetime, or nearly so with the great mass of well-to-do men, to accumulate enough in order that labor shall not be a physical strain on them the latter portion of their days. I have hired a great many young men in my time and have paid them from \$15 to \$25 per month to labor on a farm, and they have invariably stated that they could save nothing in the shape of wages. A young man should always endeavor to save a part of his wages, be they ever so small, for the purpose of starting into some business, at some future day, and unless he does adopt that principle he is bound to be the slave of some other man as long as he breathes the breath of life. Throw away the fashions that will cost you all the physical labor that you possess, when young and vigorous. You will need scores of those dimes to maintain you and your family when you get old and decrepid; and when you get old and on the stool of repentance, then it will be too late and you cannot retrace your life steps, you will say to those around you: "If I had my life to live over I would take a different course, financially, than I have taken." Never purchase an article because it is cheap, unless you have an actual use for it, and make that use of the articles you buy a benefit to you financially. Live within your means, if you have to live a little hard. Use all the economy that is in your power; be honest, and industrious; save up a portion of your earnings; use economy in every thing you undertake; have a mind of your own, never give your opinion for any other man's, unless you know that he is more in the right than you are, then yield manfully, but never till you are convinced that you are wrong. Read both sides of all questions that you come in contact with, religiously and politically; there are always two sides to any question, and any question that will not stand investigating, is a one-sided question.

Young man, show yourself to be a man. When times are hard and money scarce, work for what the man you hire to can afford to pay you, for he is the one that knows what he can afford to pay, better than the man that is to do the labor. How many times I have hired young men to do farm labor, and there was one thing they appeared to understand, and that was the price of labor for a good hand; and there is another thing they did not understand, the common routine of farm labor. They did not know whether they could earn \$15 per month or not. A young man ought first to learn what belongs to a day's work, before he has the audacity to say that he wants so much, for a day's work, or a month's service, and in all justice to the laborer the employer should know when his hand has earned his money. Then is the time to stop and inquire of your better judgment and say to him, this will do for to-day, and retire to the shade.

CULTIVATION OF CORN.

Sometime ago in the FARMER I stated that I would give my experience on the cultivation of the corn crop. Now, I am an advocate of fall plowing for corn all the time. I have farmed some when young, in Pennsylvania, Wisconsin, Minnesota, Iowa, Missouri, Nebraska, northern and southern Kansas, and I have found that fall plowing has been the best and I always regretted that I could not get more of it done than I have. Ground plowed in the fall has a great advantage over spring plowing, as the winter frosts act as a pulverizer, and the finer the ground can be pulverized the better will it be for the crop, particularly corn and potatoes. Plow under all the stalks and trash on your corn ground, and the deeper the better, then in the spring plant not later than the 25th of April and ten days sooner, if you can. I have seen corn cut down her with frosts in the spring, several times, and in the fall it was the best corn. Have no fears of planting early. Corn planted early here, has always been the best, some have planted in March. Harrow your corn ground, before planting, or immediately after; use a two-horse drill, or a one-horse drill; they are preferable to the check-row planters, as they are more uniform in the dropper than the check-row planter. This dropping from two to five grains in the hill is a bad practice, from the fact that many kernels will often be planted in one spot which is injurious to the crop, the drill cavity for dropping being smaller, will seldom drop more than one grain and it distributes the grains about 12 inches apart, and the corn is not bunched up, one stalk to smother out its neighbor. Keep your harrow moving on your corn, and the oftener the harrow passes over it, the more the ground will be

pulverized, and when it is large enough to put on the cultivator the better you can cultivate, and consequently the better will be the crop.

Do away with this old foggism of shallow plowing and burning off the corn stubble. This burning off everything that is left on the wheat and cornfield, is robbing old mother earth outright, and if you expect to make a livelyhood by that kind of farming, you will find yourself bankrupt, insolvent, and your farming a failure. Some of the best land here this season will make sixty bushels to the acre, and there are some fields that will not make ten bushels to the acre. [Is this difference owing to cultivation.—Ed.] HENRY BUTLER.

140 miles south west of Topeka.

Fever Among Texas Cattle.

The Texas steer carries this disease, whether on the road or on the range at home; and to undertake to explain by saying that it comes from cracked heels is not meeting the issue. An animal from the north going to pasture in Texas or to the range where the cattle are quietly grazing, with no excitement, will take the disease. It is no more contagious when the Texas steer is brought to pasture at the north. Whenever the northern steer meets the Texas during the season when there is no frost, he is sure to take the disease. What the disease is, and how communicated, has not yet been explained; whether it may be the farmer or the grazier who has suffered at the north or the Texan who has been on the drive or at home during a lifetime, all alike are in the dark. Thus far there has appeared but one preventive, and that is frost. Either at home or at the north, during freezing weather there appears to be no danger; but at all other times there is: It would seem to be reasonable that thorough investigation by competent veterinary surgeons ought to discover the cause and the remedy. But until such discovery and remedies can be reached, there is but one safe course; and that is to exclude all Texas cattle from the pastures, markets, railroad routes and shipping yards of the country during the season from the first of April to the first of November. It may be urged that this is a hardship to the Texas trade. Admitted, but it is a less hardship to the Texan to be excluded than it is to the northern cattle to let them be admitted. It is easier to say what they shall not do than what they may do. This is a necessity felt for the safety of the herds of northern Texas, that some regulation should be made by which the cattle from southern Texas shall be moved. It has been, heretofore, considered comparatively safe and free from danger to move cattle from any portion of Texas to the western plains, and that when they reached the dry range the danger from infection or contagion had passed. We are not aware that when they reach as far north and west as Colorado, that they have ever carried any disease to the native or acclimated cattle. They then can be moved to any part of the country from the plains as safely as any other cattle.

The outlet for the Texan seems to be, for the present, over some trail that may be set apart for them, through northern Texas and the Indian territory during the summer season, or being brought directly to market during the winter. In years past feeders and graziers in the western states have bought, freely, stockers and cattle for grazing and feeding, at the stock centers during the summer season. We know that these purchasers have refused to buy our northern and graded steers on account of the danger of carrying the Texas fever to their farms. We know that if this Texas trade is continued it will entail a loss to our northern breeders equal to if not exceeding any loss that the Texan may suffer for the want of a free market for the cattle during the warm weather.

It is then a fair question as to what shall be done with this trade. A question that must be met; and ought to be met before the coming spring. It is not the cattle from southern Texas only that need be guarded against, but from northern Texas as well. The Texas fever is known and dreaded not only at the south but in every northern state, and for the past season in England also, and if the free handling of cattle at the Union Stock Yards, at Chicago, and the yards at St. Louis and Kansas City, is continued, there will arise a necessity for other yards or other facilities for handling northern cattle.

Eastern and English buyers will not subject themselves to the probable losses to which they may be liable from this exposure.—Breder's Live-Stock Journal.

Improvement of Stock.

Seeing Mr. Coburn's reply to Mr. McCormick's inquiry about his hogs I concluded that perhaps those I had last year were of the same breed, for we read that satan entered into a herd of five thousand swine at one time, which, however, were choked in the sea, although I have thought sometimes that they were not all drowned. Well, those I had last year were always on the go, and into all the mischief they could find. The first thing I noticed they got to sucking my cows—something new—but I accounted for it by them nestling up to the cows to keep warm and pickling up after them, but as they grew older they got to killing my chickens, so I shut them up and tried to fatten them. They seemed to mature at about 75 lbs. each, at least were compact little fellows, and grew very slowly and looked like a race of little hogs. As soon as possible I disposed of them; so I concluded when I saw what Mr. Coburn said about Mr. McCormick's hogs that mine must be the same breed, which was the Berkshire breed, however there are some very fine

Berkshires, and make nice smooth hogs of good quality and fair size. The idea here is to get hogs that are growthy instead of these compact little fellows, neither do I like to see them a tub of lard, but we can have good growthy hogs with plenty of fat and lean, the kind that is in demand now, and the kind that makes the best of meat, and such hogs are healthy as a rule and make good wholesome meat. Keeping hogs as fat as they did a few years ago is considered by many to be the chief cause of cholera, &c. Now it is not necessary to return to the old breed of hogs that they had to follow cattle to market, sometimes several weeks drive across mountains and through swamps, (now termed hazy splitter, prairie rooters, elm peelers, and such names), neither is it necessary to start any new breed but use judgment and do not go to either extreme. These old fashioned hogs were very useful to follow the cattle to market, and the improved hog of to-day could not have followed those old fashioned cattle, but since the railroads are the means of taking stock to market we have quite an improvement in cattle as well as hogs.

We now see at the fairs that the tendency to fatten cattle for the show to be overdone in the case of hogs a few years ago. While I believe in improvement I do not like to see anything so overdone. It is no uncommon thing to see cattle so fat, as to say the least—to be uncomfortable, then a great blanket thrown over them, no matter how hot it is, they must be fat and blanketed. Now this forcing is contrary to nature, and in time will show the bad effect produced by it. It is true the chief object in raising thoroughbred cattle is to use males on our common cattle and grade them up, and we want them to mature early and to take on flesh rapidly; yet we do not want all tallow. Prime beef should be the object, and in order to make it a success in shipping fat cattle to the English market we must have good beef cattle. These western men know it, and in time we will see our mistake if we do not keep up with the times.

Dr. Sprague has been examining specimens of meat of the common cattle and high grade and finds a remarkable difference in the meat. He says the high grade meat is much superior to the common. That even in the muscular parts he found considerable fat intermixed with the lean. Now this is the object most desired in beef making; meat well intermixed as possible; and it can be attained by judicious breeding and feeding, while you feed the scrub up to as much fat as he will take on, the meat is not as juicy and tender as that of the high grade. The amount of fat to put on depends entirely in what condition a person likes his meat. Some like their meat very fat while others cannot eat the fat at all, and a thoroughbred may be made so fat that it cannot be eaten. I have seen them at the fairs when I thought I would rather look at them than undertake to eat a piece of the beef.

Then if we can make so much better quality of meat by grading up our cattle, have them mature earlier, and grow larger, certainly it is money in our pockets to grade up, feed better, give plenty of shelter, and start on the road to success. M. WALTIRE.

Carbondale, Kas.

Dirty Wool.

Walter Brown & Co., in one of their monthly wool circulars some weeks since, created quite a hostile spirit among Kansas wool growers, by charging that some of the wool growers of the state resorted to questionable practices to make heavy fleeces. A writer in the Emporia News comes to the defence of W. Brown & Co. and reiterates the charges with emphasis. We trust this agitation will result in smoking out the rogues. We give some extracts from an article published in the News. The writer who is a wool grower, says:

"It is high time that the intelligent men engaged in this business should look the fact square in the face that Kansas wool suffers the odium of being very dirty wool. As a consequence its value is depreciated, and its quotable price in the wool markets is at least two cents a pound less than that of the same grade and quality from Ohio or Michigan. It may be conceded that one of the agencies contributing to this condition is not preventable. High winds always prevail in Kansas in the spring months and up to sheering time, and during this period sheep are exposed to prairie dust which is driven by the velocity of the wind through the outer surface of the wool. The spring of 1880 was very dry and windy, and the consequence was that the most careful management could not exclude the dust which, in some cases was forced through the wool to the skin. But the dirty condition of much of the Kansas wool can not be wholly accounted for by reference to atmospheric causes. Any one who has sampled the wool of Lyon, Coffey, Greenwood and Woodson counties this last season must have observed great contrasts in respect of cleanliness of condition in different lots of wool exposed during growth to precisely the same atmospheric conditions. And there is no difficulty whatever in ascertaining the cause of this discrepancy. Ignorance or culpable negligence of those responsible for the care of the sheep is, in every instance, the cause of this inferior condition of the wool. There has not been an adequate supply of litter in the sheds; or the sheep have been driven to and from the pasture over long, dusty lanes; or land prepared for sowing of oats has been fertilized, not by spreading the refuse matter of the sheep sheds upon it, but by corraling the sheep night after night upon consecutive portions of the field; or the arrangements for shearing have been uncleanly; or the clip has

been piled up under an open sheep shed, exposed for weeks to the southwesterly winds of summer laden with dust; and so on *ad infinitum*. Is it surprising that a manufacturer inspecting such wool in a warehouse in Boston or Philadelphia, comparing it with a similar grade from Michigan or Ohio, after making all due allowance for the atmospheric agencies, should accuse the wool grower of deliberately inserting a part of the dirt?

The causes assigned above of inferior condition of wool, are not imaginary. The writer knows whereof he affirms. "One sinner destroyeth much good" is an inspired statement, and one lot of such conditioned wool as the writer has seen, this last season, in Lyon, Woodson and Coffey counties, when exposed for sale at the seaboard, stigmatizes Kansas wool, or indirectly affects injuriously good conditioned clips from the same state. That there may be some wool growers in Kansas who have deliberately introduced foreign substances into their fleeces or sacks is not to be gainsayed. Such things have occurred in Michigan and Ohio, and the perpetrators have been summarily "smoked" out. If the business of wool growing is not disgraced by some rogues engaged in it, it is passing strange that sheep-raising should be the solitary exception to all other branches of human effort. The writer has no knowledge of any such practice, and yet he is morally convinced that such a charge could be substantiated in at least one instance in Lyon county, and one in Coffey county. Nevertheless, he is fully persuaded that the wool growers of Kansas as a class are eminently intelligent, honorable and enterprising, and in no respect inferior to the wool growers of the older states.

Messrs. Walter Brown & Co., of Boston, in their circular of November, called the attention of Kansas wool men to the fact that frauds of this nature had in some instances been practiced in Lyon and Coffey counties, and that prominent growers in those counties had given them information to that effect. They did not assert that this kind of fraud was a common one in Kansas. The Greenwood County Wool Growers' Association are reported to have adopted at their annual meeting, in December last, a *brutum fulmen* against this highly and justly esteemed Boston firm, because they had made a statement which every intelligent man outside of Greenwood county, conversant with the subject, believes to be true; or, if not true to the letter, abundantly justified in view of the foul condition of a considerable portion of Kansas wool. The writer thanks Messrs. W. B. & Co. for thus calling the attention of Kansas wool growers to the objectionable condition of much of the Kansas wool; and in so doing he believes he is expressing the views of the leading wool growers in the state.

How to Sell Our Wool.

We are often surprised that we in the west have not some system of disposing of our wool. We do not know but that we get about as good prices as anybody, but it is no fault of the wool growers if we do. We came near saying it was accidental if we did, and it would be about as near right if we had.

In the spring as soon as the clips are off, and often before, there come among us buyers of little or no judgment in these things. They drive through the country lively and stylish, buying as they can. As soon as the bulk is bought there are no more of them around till the next year. They say you must sell to them or sell as you can, impressing us that as soon as they have withdrawn from the trade we are to be left for the next year, like a stock of belated goods, and practically it amounts to very nearly the same thing generally.

When the buyer comes he goes to the big lots first. Their prices are usually private, so far as the farmer is concerned. The buyer says so and so, and that brings in usually all the cats in the neighborhood. No discriminations are made in favor of the better condition of fleeces, or even in the quality of the wool, it is all of one price.

We have hoped some better system might be organized than this. Wool, like any other product, should be sold on its merits. The wool growers' exchanges in some places work well. The wool is bulked, stapled, and each grade weighed to each owner. He then knows just what he has in the market and in the wool house. Buyers know just where to find the grades of wool they need and just how many pounds they can find there.

We see no reason why such should not operate well. The trouble is to organize these wool houses and offices satisfactorily. Wool growers have been heretofore unorganized, and in no fix to do anything but sell, as it might happen, to whoever came around.—Rural World.

Poultry.

The Barn-Yard Fowl Against the Asiatic.

I take exception to friend Marsh's arguments and conclusions, that because a committee "by looking at, or feeling the weight" of a certain number of coops of fowls at a fair, are enabled to give an opinion of any value whatever, as to "the best breed of fowls for market and for the farmer."

As to the best breed of fowls; that is a matter, I fancy, that cannot easily be decided, if indeed there is any best about it. In the past twenty years I have raised all kinds save the Brown Leghorns and the Spangled Hamburgs, and I am free to confess that I have found no marked advantage in any Asiatic breed over other Asiatic fowls. In the single item of

weight they carry off the palm; but I have seen as heavy Dark Brahmas, Shanghai and Cochins as I ever have Light Brahmas. Indeed the heaviest fowls I ever saw were three Buff Cochins, hens, I once owned, whose united weight was 31½ pounds.

My objections to all the Asiatics as a fowl for the farmer may be summed up under three heads:

1st, They rarely lay more than six to eight eggs until they show a broody disposition, and it takes a week's hard work to break up a Light Brahma, and two weeks more to get them started to lay the next half dozen eggs.

2d, They are the greatest predators of the barnyard. Farmers do not (nor is it desirable) keep their fowls in fenced yards, and it is very rarely the case that their garden, or near-by fields, are so fenced as to keep the poultry out, and I find it impossible to raise certain classes of vegetables if there is a Light Brahma in the flock. They have an especial fondness for peas, and unless you can grow them upwards of six feet from the ground, or on the opposite side of the farm, they will harvest the crop for you.

3d, They are slow in maturing, and until a Light Brahma gets in full feather, they are unfit for the table.

On the other hand, the Asiatics will, during the year, lay as many eggs, probably, as any other breed. They are shifty, good mothers, docile, and a delight to the eye after they are in full feather.

The farmer, as a rule, keeps poultry not for the purpose of selling eggs and chickens, primarily, but to minister to his table comforts. He wants a chicken that will make good fries by the middle of June, about which time our harvest commences and extra help is required. It is impossible to supply the farmer's table with fresh meats from the towns, and he must, perforce, supply it from the farm.

As a rule, April is as early as it is profitable to have the chickens come off, and at eight to ten weeks old the Asiatics are unsightly objects, long-legged, bare of feathers, with no muscular development, and about as good eating as squabs. At about four months old they begin to fill out, the muscles to become firm, and make fair table birds, but if they have been fully fed and raised for market, they have consumed up to this time from one-third to one-half more than the common barnyard fowl, the Dorking, and some others.

A better fowl for the farmer or the poultryer, in my judgment, is a cross of the Asiatic upon the common fowl. I have, at this time, crosses of the Light and Dark Brahma, and Partridge Cochins, on the common fowl, that commenced laying when less than five months old, made good table birds at two and a-half months old, and at this writing, pullets that will weigh from five to six pounds. It strikes me that this is the kind of a bird that will suit most farmers, or, for that matter, those who keep fowls for profit.

In all the markets accessible to us here, chickens are sold by the dozen, and less than a month ago, I saw one of our largest dealers buy two lots at \$1.50 per dozen, and there were fully twelve pounds difference in weight to the dozen, but the small ones brought as much as the large ones.

I would advise no one in Kansas to raise chickens for market. Raise what you want for your own eating and eggs for your own market. There is profit in eggs at eight cents per dozen, if you keep the common barnyard fowl, or a cross of them upon the Asiatics.

Milwood, Kas.

A. G. CHASE.

Poultry Items.

Pullets will lay early if well fed.

Fowls, to do well, must have constant care.

The best floor for a hen-house is clean, dry earth.

Fowls should have dust where they can flutter in it at will.

Fowls will not fatten in cold weather unless well sheltered.

An orchard will be benefited by being used as a poultry pasture.

If a man has a good place for geese he may profit by raising them.

Painting the inside of a hen-house with gas-tar will free it from lice.

Not one person in ten knows how to feed fowls and treat them properly.

There is quite a knack in dressing fowls so that they will look plump and inviting.

If poultry is intended for market, economy requires that it be fattened and killed early.

Poultrymen think the best results can be attained by giving fowls cooked food at least once a day.

A man whose hens ate their eggs as soon as laid, gave them a shell filled with mustard. It cured them.

A poultry-raiser should keep a flock of guinea-hens to give the alarm when hawks, dogs, sneak-thieves, etc., approach.

The best food for fattening poultry is sweet fresh oatmeal or barley meal, mixed either with scalded milk or water.

How many farmers there are who, although they are good farmers in other respects, are very slovenly and negligent in regard to their poultry.

It is natural for a hen to scratch as to eat, so fowls that are kept in pens should be furnished with screenings, weeds, etc., in which they may scratch for food.

A teaspoonful of powdered charcoal, a quart of bran, and refuse from the table, mixed and moistened with warm water, are the ingredients of a capital egg-producing food for hens.

Farm Letters.

CARM, Pratt Co.—Our pleasant winter weather seems to have quit, and we are getting in place thereof cold, blustering winter weather in earnest—18 degrees below zero. The hard, dry freezing is severe on the wheat; some fields have the appearance of being killed. However, we hope for the best.

Some law or laws to prevent the wholesale swindling of the frontier counties by organized bands who come here to fill their pockets at the counties' expense, is most urgently demanded of our legislature. There is a law, I know, that restricts the issue of county warrants, but the law is entirely ignored, and today the indebtedness of this county by reason of warrants issued, bearing ten per cent. interest, is three times the valuation of the property in the county, taxable property I mean. This statement may seem wild, but it would not be difficult to prove if the county records had not been stolen just before a certain committee were to examine them. Now, then, if the legislature, this winter, could devise some means to save us from these outrages, they would confer a great favor upon those who wish to make permanent homes on the western frontier.

D. G. BENTON.

GARFIELD, Pawnee Co., Jan. 22.—We have had a very hard winter. It froze up the first of November and the ground has not thawed out since. Can not tell whether the wheat is injured or not. Wheat was put in in good season and the ground was never in better condition than it was last fall, and it came up quickly and never looked better than it did before the cold weather set in. The crops, excepting broom and rice corn, were pretty slim. There was a great deal of broom corn raised, and it is a paying crop; stands the drought well. Rice corn did not yield as well as expected, but was a fair crop. I do not think it as good as Indian corn to fatten hogs.

Stock is doing as well as could be expected, without shelter in such cold weather. There has been a great many sheep brought into the county the past year.

V. DILLAM.

SMITHLAND, Jackson Co., 45 miles southwest of Topeka, Jan. 17.—So far this has been the coldest for some years. Sunday, the 8th, the thermometer indicated 23 degrees below zero. The cold weather set in early in November and froze some of the apples and potatoes. Apples, peaches and small fruit were a good crop here. The wheat and oat crop was light. Corn medium; average about 30 to 35 bushels per acre. Wheat and rye look badly now; about the same amount sown last year. Corn sells at 25c; wheat, 70c; hogs, \$3.75 to \$4, most all sold.

Stock looks well and has wasted very little feed yet. There are being four or five hundred head of steer stall-fed along Soldier creek, north of the reserve.

Soldier City is a nice little town sixteen miles west of Helton on the Kansas Central railroad, where it crosses Soldier creek.

R. J. TOLIN.

GEOROCK, Sumner Co., 175 miles southwest of Topeka, Jan. 14.—We have had our share of cold weather; are ready for it to let up any time now. The past year has been a trying one in this new country where the first settlement of importance began a little over three years ago.

Wheat good in quality but quantity light. Potatoes of both kinds very scarce. The first time I ever failed on a crop of sweet potatoes; cause—the web-worm. Best pieces of corn, 50 bushels per acre; much of it a less yield and chaffy. Very few vegetables of any kind this season.

Stock doing well and feed will be plenty. The short hay crop prompted farmers to make the most of corn fodder. Parties returning from the territory report cattle looking badly, and an unusual number dying; cause—scarcity of water. The sheep herds are making good use of the winter range. The severe weather is proving too much for some of them unprovided with shelter.

The abundant rains of August did not reach this section, as reported in the counties northwest. Have had but a few showers in September—just enough to get plowing done for wheat. Wheat came up and looked well, but lack of rain since is hard on it this severe freezing weather. Have had several snow storms, but only a small quantity of snow, and this mostly blown from wheat fields. Hope a few more years will teach our farmers that the money is not to be found in wheat. Many of them are getting cattle and some of them sheep, as fast as possible.

Cannot some law be passed that will stop the wholesale slaughter of prairie chickens and quails. Three to four dollars per dozen tempt every lazy starving in the country to prowl around day after day shooting the farmers' best friends. I say amen to an article on this subject that recently appeared in the FARMER.

A. SEAVEY.

GIRARD, Crawford Co., 120 miles southeast of Topeka, Jan. 15.—We are living below zero here largely the last month or so; 16 below on the 14th inst again. But our kind father sends a little snow along with the cold snaps to protect our wheat, and much of it needs it for the winds have laid the field largely bare to these terrible frosts. The outlook for wheat is not promising. Much of last year's corn is in the fields. Average about 55 bushels per acre. Some of us are making up to our interest as farmers. We have a Farmer's Alliance flourishing, in which we have

very interesting discussions on practical questions, trying to improve ourselves eminently, socially and morally. And after all isn't that what we need? But can't we now ask our lawmakers what are you going to do for us this winter? And by no means least—What in behalf of temperance? And this is a good time for our practical hedge growers to tell all they "know about hedges."

Respectfully

J. E. WILKIN.

OTTAWA, Jan. 19.—Will some of the readers of the "Old Reliable" please give me some information, through the columns of the FARMER, in regard to the culture of peanuts in quantities of two or three acres? also what quantity is required to seed an acre? What is a good, average yield per acre?

We have been having cold weather in Franklin county for a month or so. Corn most all husked.

E. W. M.

RICHMOND, Franklin Co., 45 miles southeast of Topeka, Jan. 17.—This election was visited last Thursday by a real norther. About an inch of snow fell, the first of any consequence since November. Friday morning mercury stood at 23 degrees below zero. Ground frozen to a depth of 21 inches.

Hay is selling at \$4 per ton in stack; stock fields at 25 cents per acre. Cattle and hogs are doing well. A good many sheep are dying from the effects of the scab or a cold bath, I hardly know which. Several flocks in this neighborhood were afflicted with scab. Some were dipped and some were not, and it appears that those that were not dipped are doing tolerably well, while those that were dipped are dying at a fearful rate. A word to the wise: Don't dip your sheep in cold weather. Some flock owners of experience recommend an occasional feed of sulphur as a preventive of scab and other diseases. I have been doing this with my Cotswolds, and have had no disease.

Cor Du Roy.

MINDEN, Kearney Co., Neb., Jan. 14.—Inclosed please find renewal of my subscription to the KANSAS FARMER. Our crop last year, 1899, was somewhat a failure. Wheat yielded from 6 to 18 bushels; oats about 25 bushels, quality bad; barley, 30 bushels, quality good; corn from 10 to 30 bushels; potatoes, 1 crop, about 70 bushels per acre, but the present condition of the soil gives prospect for a good crop the coming season.

Kearney county, Nebraska, is about 30 miles north of Phillips county, Kansas.

F. BREEDMER.

FAIRVIEW, Brown Co., northeast part of Kansas, Dec. 17.—A few weeks ago I noticed in the FARMER an inquiry about the Canada pea. A neighbor of ours brought some from Wisconsin, where he had successfully raised them. Obtaining seed from him, I sowed them three or four years. They grew well and were good to eat while green; but while maturing, insects appeared, which increased the subsequent years, making them unfit for table use when ripe. In more northern latitudes these insects do not trouble and there this pea is a profitable product, but not in Kansas, I have discovered.

Mr. Young inquires, Is there a thornless honey locust? There is, and it is a thrifty tree. I have a considerable number on my place, and I noticed one about three feet in circumference and full of seeds every year.

Our part of the state has been white with snow since December 14th.

H. F. MELLENBACH.

LEAVENWORTH, Leavenworth Co., 50 miles east of Topeka, Jan. 21.—The first half of winter is gone. It has been a bad half, full of the most disagreeable weather; too bad for building, hauling, husking, or any out-door occupation, and happy has been he who, with plenty of fodder in the rack, or hay in the barn, could take all day comfort by the fire and manufacture pity for his less fortunate neighbor. It was also a bad fall, and before farmers were looking for cold weather, potatoes were frozen in forever; apples frozen on the trees, in piles, and bins. With the unusually retarding fall and winter weather, it is a patent fact that a great deal of the work that would have been done is still undone. Query—will we not have to look a little out, or get thrown behind with our spring work? Some of my neighbors are talking about a February thaw; I am sure I do not know on what base, save a hope it may happen so. But if we do get a thaw out before spring, it may be made very valuable to whoever has his plow in order and team ready to hitch to. In this a benefit next to fall plowing would be made, and so much gained on last fall's loss.

The cold of December 29th and 30th undoubtedly killed the peach buds. It is safe to say they will be one of the scarce fruits the coming season. I would suggest to those that have trees four or more years old, a good plan to renovate the tree with new wood. I have tried it and am pleased. Saw off all the main limbs four feet from the ground. A new and vigorous head will be pushed out in one season that will be ready in 1892 to give much more satisfactory crops of fruit.

We have had several light snows; probably not more than four inches on the ground at any one time. Where wheat was early sown, or where trash lay on the ground, it has been held and rendered secure. On late sown wheat and bare and exposed situations, the winds soon swept the snow off, leaving it naked and suffering. What a boon a thin sprinkling of straw, old hay, or rejected fodder, would have been to such spots. It would have been the making of some late-sown wheat fields. We

see it now. Will we remember it to use to our advantage when another such opportunity occurs?

Notwithstanding severe weather stock of all kinds is in good condition, with a sufficiency of shock and stock to carry them through.

Corn is worth 33c; hay, \$8; potatoes, 60c; butter, 18c; eggs, 25c; wheat, 80 to 85c; cattle, 3 to 4; hogs, 4 to 4. E. J. HOLMAN.

FENWICK, Republic Co., 100 miles northwest of Topeka, Jan. 13.—Temperature, to-day, was 22 degrees below zero, with it sinking at sunset, January 9th, temperature was 32 below, being coldest day that I ever experienced.

A meeting of farmers was called in Elk Creek township, Republic county, on the night of the 12th inst, for the purpose of forming a farmers' alliance. Twenty members having signed the constitution, they proceeded to organize by electing T. J. Ryman president, D. Doran vice-president, F. R. Truesdell secretary, and J. T. Anderson treasurer. A committee of three was appointed to draft by-laws.

I am indeed glad to see farmers growing in grace and in the knowledge of the truth—that there is need of a farmers' alliance, and I wish the good begun work may go on until there is an alliance in every school district and the farmer receives his just reward for labor. With just representatives in all our law making bodies, then indeed it seems as though a new era will begin to dawn, with justice on earth and good will between men.

D. D.

P. S. I would like to have some one tell us, in the FARMER, how to grow flax seed for market, and oblige a number of readers of the FARMER.

Advertisements.

SHEPHERD, MARRIED.

Wanted to handle with necessary assistance, 3,000 Sheep. Address, stating wages, to G. SCHRIEVER, Newton, Kas.

WANTED—INFORMATION OF JOHN LESLIE QUIG, son of William Quig, deceased, formerly of Philadelphia, who is entitled to a small sum of money. Address The Pennsylvania Co., 1000 Market Street, Philadelphia, 41 Chestnut St., Phila.

BEST WASHER AND WRINGER in the world. Guaranteed to do perfect work or money refunded. Warranted for 5 years. Price of Washer, \$7. Sample to agents, \$3.00. Price of Wringer, \$7.50. Sample, \$4.50. Circulars free. P. S. ADAMS & CO., BUREAU.

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AGENTS WANTED To Sell the Favorite CAKE AND BAKING PAN. Will sell on sight to every housekeeper. The success of our agents proves it to be the best selling article in the market. One agent made \$100 in a week, another \$25 in 10 days, another \$41 in 4 days. Selling and Freight Free to Agents. Send for circulars to nearest address. HERRARD & CO., Cincinnati, O., or St. Louis, Mo.

WALTER BROWN & CO., WOOL COMMISSION MERCHANTS, 152 Federal St., Boston, Mass. CONSIGNMENTS SOLICITED. CASH ADVANCES MADE.

Commissioners to cover all charges on wool after it is received in store, (excepting interest on advances) including guarantee of sales on Washed Wools, five per cent; on Unwashed Wools, six per cent. Where wools are held under instructions of the owners for more than three months, an additional charge of one per cent. will be made to cover storage and insurance. Information by letter will be cheerfully given to any who may desire it.

WALTER BROWN & CO., 152 Federal St., Boston. REFERENCES.—E. R. Mudge, Sawyer & Co., Boston. Parker Wilder & Co., Boston; Nat'l Bank of North America, Boston; National Park Bank, New York.

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SYMPTOMS OF A TORPID LIVER.

Loss of Appetite, Nausea, bowels costive, Pain in the Head, with a dull sensation in the back part, Pain under the shoulder blade, fullness after eating, with a disinclination to exertion of body or mind, Irritability of temper, Low spirits, Loss of memory, with a feeling of having neglected some duty, weariness, Dizziness, Fluttering at the Heart, Dots before the eyes, Yellow Skin, Headache, Restlessness at night, highly colored Urine.

IF THESE WARNINGS ARE UNHEeded, SERIOUS DISEASES WILL SOON BE DEVELOPED.

TUTT'S PILLS are especially adapted to such cases, one dose effects such a change of feeling as to sustain the sufferer.

A Noted Divine says:

Dr. TUTT.—Dear Sir: For ten years I have been a sufferer to Dyspepsia, Constipation and Bile. Last Spring your Pills were recommended. I used them. I am now a well man, have good appetite, digestion perfect, regular stool, piles gone, and have gained forty pounds flesh. They are worth their weight in gold. Rev. R. L. SIMPSON, Louisville, Ky.

They Increase the Appetite, and cause the body to Take on Flesh, thus the system is nourished, and by their Tonic Action on the Digestive Organs, Regular Stools are produced. Price 25 cents. 35 Murray St., N. Y.

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GRAY HAIR ON WHISKERS changed to a Glossy Black by a single application of this DYE. It imparts a Natural Color, sets Instantaneously. Sold by Druggists, or sent by express on receipt of \$1. Office, 35 Murray St., New York.

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"Would not try to make butter without the Creamer," so say the many who have used the Cramer the past season.

Friend, you can make the dairy business pleasant and profitable by using one of these Creamers.

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State Agents, and Dealers in Dairy Goods, Higgins' etc., 263 Kansas Ave., Topeka, Kas.

Notice.

The firm of A. H. & A. C. Griesa of the Kansas Home Nursery has been dissolved by limitation and consent. The Kansas Home Nursery will be continued by the senior member, who was the founder of it, and has recently located on a new place nearly adjoining the City of Lawrence, where it will be his pleasure to meet all his old and new friends.

A. H. GRIESA, Lawrence, Kas.

140 Percheron Horses Imported from France SINCE LAST APRIL



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is warranted to saw a two-foot log in three minutes, and more cord wood or logs of any size in a day, than two men can chop or saw the old way. Every Farmer and Lumberman needs one. Agents Everywhere. Circulars and Terms Free. FARMERS' MANUFACTURING CO., 178 Elm Street, Cincinnati, O.

RARE OPPORTUNITY

TO ENGAGE IN

SHEEP RAISING.

I offer to sell, or lease, for a term of years, my sheep ranch, five miles east of Kirksville, Kansas.

It consists of sixteen hundred acres of railroad lands, extending to the sand hills affording ample range; a two story frame dwelling; two board sheds, one 30x200 feet, the other 28x38 feet; a convenient dipping apparatus, with capacity for dipping two thousand per day, eight acres enclosed for corals; stock yard and pasture for hogs; corals abundantly supplied with pure water; rice corn sufficient for winter's grain, and more than five hundred tons of fodder, raised on the place this past season.

It is not sold, would lease the premises, and let the sheep on shares to a responsible man experienced in sheep husbandry.

Immediate possession of dwelling given, and opportunity to put in spring crops, but would prefer not to dispose of the sheep until after shearing.

Shepherd dogs from imported stock for sale at reasonable prices.

H. L. NORTON,

Kinsley; Edwards Co., Kas.

AGENTS can make \$5.00 PER DAY Selling PLATFORM FAMILY SCALE. Weighs accurately up to 95 lbs. Its handsome appearance sells it at sight. Retail price, \$1.25. Other Family Scales weighing 25 lbs. cost \$5.00. Exclusive territory given free. Terms and rapid sales surprise old agents. DOMESTIC SCALE CO., Cincinnati, O.

SAMPLE'S Scotch Sheep Dip,

Prepared from Tobacco and other vegetable extracts. Warranted to cure Scab, destroy Ticks and all Parasites infesting sheep. Is non-poisonous, and improves the wool. 75 cents per gallon. 2 1/2 gallons will dip 100 sheep. For circulars, address

300 West Main St., Louisville, Ky.

Breeder's Directory.

SHEPHERD, Greyhound, Scotch, Skye, Bull and Rat Terrier Pups for sale by B. G. Seebach, Peru, Ills. Enclose stamp. Author "Our Dogs, Disease and Treatment."

ELM RUN HERD.—M. & W. W. Walmire, Carbondale, Osage Co., Kansas. Breeders of Thoroughbred Short-Horn Cattle and Chester White Pigs. Stock for sale.

T. T. FROWE, breeder of Thoroughbred Spanish L. Merino Sheep, (Hammond Stock), Bucks for sale. Post Office, Auburn, Shawnee Co., Kansas.

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

FOR SALE. Scotch and black & tan rat pups, \$10 each; shepherd pups, \$15 to \$25; also pointers and setters. These are lowest prices. All imported stock. A. C. WADDELL, Topeka.

Nurserymen's Directory.

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THE KANSAS FARMER.

E. E. EWING, Editor and Proprietor,
Topeka, Kansas.

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The greatest care is used to prevent swindling humbugs securing space in these advertising columns. Advertisements of lotteries, whiskey 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.

Subscribers should very carefully notice the label stamped upon the margin of their papers. All those marked "N 7" expire with the next issue. The paper is not renewed at the expiration of the time paid for, and to avoid missing a number renewals should be made at once.

Post Office Addresses.

When parties write to the FARMER on any subject whatever, they should give the county and post office both. Some of the new post offices are not put down in the post office directory, and when the county is not mentioned, the post office clerks do not know where to send papers or letters.

Editor Sick.

If the FARMER is lacking in some of its departments this week, the indulgence of our readers is asked. The editor has been confined to his bed with malarial fever, since the previous issue of the paper.

Our Club Agents.

After the 10th inst., to which the time for competitive clubs was extended, the books will be made up as fast as possible, and the prizes due will be awarded. We have large numbers of names on the files which will require several days to transfer.

Clubs may still be secured on the old plan of ten names at a dollar each, with a free copy to get up of the club, but names and partial clubs [secured under the new prize arrangement, will not count on new clubs.

The Grape.

The article published in the FARMER this week by Dr. Stayman, is of special interest and value to the grape growers of Kansas.

The great seed and agricultural implement house of Trumble, Reynolds & Allen, of Kansas City, has an advertisement in this issue of the FARMER.

The Barnes Wire Check Rower.

This implement, of which we give an accompanying illustration has become so popular as the only perfectly successful wire check rower, that we desire to acquaint any our readers who may not be familiar with the machine, of the fact. Chambers, Bering & Quinlan, of Decatur, Illinois, the manufacturers have for years kept its advantages prominently before the public and pushed their agencies throughout the corn growing section of the country until the Barnes Wire Check Rower can be found on sale at nearly every point at which corn planters are sold. Their claim of having the largest establishment of the kind extant, is a very just one, the increasing heavy demand requiring a constant enlargement of manufacturing facilities and their immense and handsome factory is the result. The advantages of this check rower is very fully and truthfully narrated in their advertisement in this paper and to which we commend our readers' attention.

In addition we would say that the annealed steel wire used is made of the best quality, expressly for the firm, and is superior to all others for this purpose. The wire does not cross the machine thereby avoiding side draft and saving much constant wear on the wire, which therefore will long outlast one that does cross the machine. Chambers, Bering & Quinlan have been in business for many years, and the firm is very reliable, responsible and popular with all who have dealings with it. They are also well known as the manufacturers of the Brown Elliptical (single), and the Champion (double), Hog and Pig Rings so favorably known throughout the land as the only rings that close on the outside of the nose, thus preventing it becoming sore.

The Farmers' Convention.

Editorial comments and criticism have been full and free and not particularly friendly. Its want of leadership, coherence, and unity of purpose, was probably due to the presence of boards of trade, railroad men, and others whose interests are adverse to those of the farmers. They, with the aid of a few political hacks, managed to divert time and attention from real, practical work to the manufacture of gas and buncombe. Their presence was due to the mistaken breadth of the "call." Once admitted, there was no power that could prevent them from monopolizing its time, and in a measure, controlling its action. Being thus disturbed and outgeneralled by their natural enemies, (coming in as invited guests), it is not fair or just to the farmers of Kansas, to point to the action of that convention as a specimen of what the farmers of Kansas are capable of doing.

The purpose of this communication is to call attention to some of the mistakes made by the managers of the convention.

1st, It should have been called a week sooner,

so as to have enabled members of the legislature to attend and form their opinions of the farmers' necessities and demands.

2d, The call should have been for a mass meeting of practical farmers, and the only "credentials" required should have been evidence of that fact.

3d, Boards of trade should not have been admitted at all, for the reason that in their conception, organization and action, they are almost always inimical to the farmers' interests. They have, at best, a very faint legal existence, and appear to be responsible to nobody. They at times combine to oppress farmers and small dealers. At other times they divide, and under the names of Bulls and Bears, gore and squeeze each other. They have no more business in a farmers' convention than wolves have in a sheep corral.

3d, Representatives of railroad and transportation companies should have been admitted for purposes of consultation and to give any information they might be willing to impart, but without the right to vote, and they should have been known and recognized as such representatives.

A convention organized as I have indicated, would have been a farmers' convention. Its action would have been the action of farmers. They, alone, would have been entitled to its honors or responsible for its failures.

The greatest mistake of all was a failure to provide for a lobby committee to attend upon the legislature, and by all proper means promote such legislation as is required, with power to call another convention, if they deemed it necessary. Adverse interests will be thus represented. Men and money will not be wanting. Railroad bosses, personal and local favors, and the political support of rich and powerful corporations, stand opposed to us. They are in "dead earnest." Every legislator's character and political aspirations are known to them, as well as the best method of approach to each one.

To this almost invincible array in the convention, appears a few earnest but somewhat incoherent resolutions, and then leaves its friends in the legislature to fight the battle as best they may.

Yet, notwithstanding the shortcomings of the convention, the legislature cannot fail to understand what is demanded of them, and that the popular sentiment will sustain them in giving immediate relief from unjust discriminations as to the privileges of transportation, loading of cars, etc., with such legislation as will lay a good foundation for the just regulation of freight and passenger rates, and the ultimate settlement of the more intricate and perplexing questions at issue between the railroads and the people. P. C. BRANCH, Sterling, Kansas.

Thornless Honey-Locust.

I have noticed an inquiry and answer in the FARMER recently about the above named variety of tree. It is doubtless worthy of extensive trial. It has made a growth nearly equal to the cottonwood in the railroad forest at Hutchinson, Kansas. Some think that the seed from a thornless tree will not always produce the same kind. That this may be thoroughly demonstrated I have collected a few pounds of nice seed from a very fine thornless tree where no thorny one was near it, which I will distribute in small packages, among the readers of the FARMER on receipt of two green stamps to pay postage and packing. Hoping that they will give the seed a fair trial and report the result, in future to the FARMER. Let those who wish address at once, C. Bisher Harrison, Boone county, Arkansas.

Stray Law.

In looking over the last issue of the FARMER, I notice that some of the little county papers have commenced their same old story, finding fault with the law that requires all stray stock be advertised in the FARMER, and ask that the law may be repealed and county papers allowed to print the stray list for each county. That might be some profit to them in the way of securing subscriptions from adjoining counties, and would become a necessity in many cases where parties living near the corner of a county and losing stock, to subscribe for two or three official papers of other counties, besides his own, and that with the necessary expense incurred by posting and keeping, would about cover the value of quite a number of stock that have been strayed.

Now, the FARMER is a medium by which more stray stock has been restored to the owners than any other that could be provided at so small an expense. The law, as it now stands, is a benefit to the farmers and stockmen, while to repeal it as asked for by these little county sheets, would be a decided disadvantage to the farmers and stockmen, who should all use their influence to prevent the repeal of the stray law. SEPHUS, Harveyville, Wabunsee Co., Kan.

The English Sparrow.

I am a Scotchman but have been in this country for the last 20 years and will here state what I remember about the English Sparrow. When I was a boy, near Glasgow City, Scotland, I often went to hunt sparrows, and my only place to go would be the farmers' wheat stack, as I was always sure to get all I wanted of them there, as they would be in the stacks by hundreds. I also have seen them in Scotland sitting on the heads of growing wheat in the fields taking the grain at their ease. I believe it to be all both about them feeding more on insects than they do on grain.

J. GROVE.

Care of Farm Stock.

ESSAY READ BEFORE THE NEOSHO FALLS FARMERS' CLUB, BY C. H. NICHOLLS.

THE CARE OF FARM STOCK IN WINTER.

The right kind of care means a great deal more than the most of us do or can give them at all times. If our dumb brutes could speak, they could tell of many deeds of unkindness and neglect.

In the first place, I would give cattle a good, warm shed built so as to protect them from the north and west winds, which are so cold during the winter season. The wind-brake need not be very expensive. A few good crotches and poles and a few loads of old hay, will be sufficient for all purposes, and a great deal more comfortable than the leeward side of a barbed wire fence, as is too often the case.

Put up a good, substantial rack and keep it filled with hay, straw, or anything else that you wish to feed. Have a box or trough in the yard and keep it well supplied with salt. I believe stock need as much salt in the winter as they do in warmer weather.

In freezing weather I always aim to water them as near the middle of the day as possible, and then give them a run in the stalk fields during the afternoon, if not too stormy.

Milk cows I always keep stabled at night, feeding them the best hay I have, with a good, generous feed of corn morning and evening, with a change of wheat bran and boiled oats at times. Corn will not make as much milk as bran, but it has more butter in it, and that is what we are feeding for. I prefer, for young cows, small ears of corn without husks, as I believe they grind it better. For old cows, I would prefer a mixture of corn and oats ground together, with a warm bran slop once a day.

Some dairymen advocate milking but once a day in winter. We milk twice and think we are the gainers by it.

Spring calves should have a good, warm shelter and plenty of good hay or straw in a yard by themselves; also one feed a day of grain. Oats, I believe, are the best for them, as they will not fatten them like corn, which sometimes leaves bad effects in the spring, in the shape of black-leg. Finally, give them plenty of water and have salt where they can get at it often.

Brood sows, if not suckling, should not be fed too highly at this time of year, and should have a good, roomy yard to run in. Let them out once in a while and they will find and eat a great many things that their systems need. A few ashes and charcoal, rotted wood and old bones, will do them good. Usually, during the dry season, our young pigs run at will, not always to the good housewife's comfort, for they are inclined to be a mischievous animal, upsetting slop-pails and everything else that comes in their way. But how they will grow if they have their freedom and plenty of sour milk! It is not always profitable to let them run, however. The fattening hogs I would keep in as small a compass as possible. Give them a warm nest, plenty of prairie hay for fodder. Feed on dry, sound corn twice a day, with plenty of water to drink, ashes and salt to lick when they like, and they are bound to grow fat every day, notwithstanding old fogies will tell you that winter is not the time to fatten hogs. We always fatten our summer meat in the winter, and with good success; but they must be kept warm.

I shall touch very lightly on the poultry, as my better half has the care of that part of the stock. The usual price of eggs in Kansas during the winter season, heretofore, has been so very low that I had not thought it was worth while to produce more than was needed for home consumption, but this winter it would have paid to give the hens a little better care in the shape of warmer winter quarters. My wife thinks that ducks are more profitable than almost any other fowl, but I would not advise any one to invest in more than about twenty, as they are voracious eaters. They are good layers during the spring and summer, and can be picked almost every month in the year. Twenty ducks will yield as many pounds of feathers, worth fifty cents per pound, which is no small item.

Lastly, but not least, that noble animal, the horse, from whom so much is expected but often so little is given I am sorry to say, I would give a few thoughts. I believe all work horses, if not in harness, should be exercised in some manner every day. If not at hard labor, would think that with plenty of good hay and two small feeds of grain, with plenty of water twice a day, would keep them in good flesh and spirits. I believe in Kansas we all feed too much corn to our horses. Corn may do to fatten a hog, but I believe it is too heating for an exclusive diet for a horse. Usually I feed once a day on oats. Think that in the winter season a feed of wheat bran once a week is a benefit. It will pay to have a pair of good blankets, and when you drive and warm your horses up, and have to hitch in the cold, cover them up. Think how you would feel yourself if you were in their place. I have seen so many horses driven to town and up to the first hitching post available, perhaps covered with sweat and mud, and allowed to stand for hours in a cold, raw wind or driving rain, with nothing to protect them from the weather, while their owners were toasting their shins before some comfortable coal fire, unmindful of the poor dumb beast outside.

But I have already wearied your patience, and will close with the remark that I think the most of us could do a little better in the care of our farm stock in winter.

Mr. Lewis Wright, of London, considers bone-dust and bone-meal some of the best aids in the raising of poultry.

Cultivating Corn.

Before touching this subject the preparation for the crop is worthy of notice. Unless this is well done no after culture will give full satisfaction. Two-thirds of a stand will not pay for cultivation, and it is impossible to secure a full stand on cloddy, uneven ground. The planter will not cover well in the low places, and again it will plant too deep. The cultivation afterwards must be considered under two heads; like a sermon, namely: wet and dry. Supposing the soil good, and well prepared, a good stand secured, no weeds, and rains fall in due season, is there anything the farmer can do to add one or more bushels per acre to the crop? If there is I have not discovered it, nor have I found the man who has. Therefore under such favorable circumstances I would trust to nature, and let my team rest sooner than work without an aim. Generally, then, during a wet season, cultivation means only destroying weeds. During dry weather it means more. It will pay farmers well to settle this question. How much more does it mean? I believe there is a great deal of unnecessary work—damaging work—done in our cornfields, adding to the cost of every bushel raised. The physician's maxim is, "if you don't know what to do wait till you do know," and there is no better place to apply it outside of the profession than in a corn field. I can find only one aim for cultivation beyond the weed question in dry weather—that is this—preservation of moisture in the soil. Stirring the soil is not an aim of itself. In doing it we accomplish in a very workmanlike manner, if performed by the two-horse cultivator, two objects—loosening the ground and root-pruning. There is no question concerning the benefit of saving the moisture and weed killing. It is difficult to get the soil sufficiently packed in dry weather for corn, and one benefit of fall plowing is that it pulverizes and packs better than spring plowing. Soil may be too hard or too loose for corn. When it is too hard we plow it, and the plow is the only implement that can do it. But the plow leaves it too loose, and if done late in the season it is a difficult work (during dry weather) to get it back to that degree between the extremes most suitable for corn. Deep cultivation cannot be performed without loosening the soil and root-pruning. It is well known that we cannot injure the roots of plant or tree without checking its growth, and a plant that must do its growing in a 100 days affords little time for any supposed benefit from the dwarfing process. Deep cultivation close to the hill, both ways, confines the roots to a very small area. If left to themselves they will reach out in every direction after food, forming a net work as near the surface as they dare to do, growing stronger as the stalk grows taller, giving the latter a security in storms that it has not when confined to narrow limits. The roots of corn bear the same relation to the plant that the stem and intestines do in animals. There is as little wisdom, if not danger, in injuring one as the other.

In killing weeds, if done regularly once a week, it is not necessary to cultivate more than an inch deep, and it is useless to plow six inches if one is sufficient. But the preservation of moisture in the soil is as vital an object as the destruction of weeds, and deeply stirring the soil, I am satisfied, is not the way of doing it. Turning up the moist soil to a hot sun and parching wind, and turning down a dry surface is not a rational way to economize. Keep the surface level and perfectly fine, work it weekly if possible, until the ears are filled. In one week the fine soil will crust over and need to be repulverized or the moisture will escape rapidly. I have carried out these ideas, as far as possible, for several years, and always found that the oftener and longer I cultivated the better was the crop.

Kidder, Mo.

J. W. MULVEY.

Worms in Horses.

Powdered poplar bark, two ounces; powdered sulphur, four ounces; salt, three ounces. Mix well. Divide the mass into twelve parts and mix with feed every night. This will not only remove worms but also tone up the digestive organs so the parasites cannot find a foothold.

I do not think the description of the remedy of protecting fruit trees from rabbits, by "Sephus," is very explicit, in the FARMER of January 6th. How does he use a brace and bit, with a rope of hay, on a tree two inches in diameter?

Pleasant Plain, Kansas.

C. W. DAY.

To those who have never made straw or hay ropes, perhaps the directions were a little obscure. First, dampen the hay and put it in lye sometime to toughen. When ready for business, let an assistant take a bunch in his arms and drawing out a small "wisp," which fasten around the brace where the bit should be inserted, then let the party holding the bit turn as though he were boring, and the feeder draw the hay out in a loose skein sufficient to make a rope the required thickness. The brace performs the twisting like a spinning machine. Twist the ropes the length desired; kink each one in the middle when long enough and well twisted, and it will double together like a whipcord. Lay them in a pile as they are spun and wisted. Tie them in bundles and proceed to the orchard. "Undouble" each rope when taking up for use. Commence at the ground, double three or four inches of the rope on the tree, and wind over the end to hold it in place, and spirally round the trunk of the tree as high as you wish to protect the bark; fasten with a

cord on top, and the work is done. If no bit is handy, place one foot on the bunch of damp hay drawn out and twist with the hands, and in this way straw ropes can be made very rapidly. Any one can do it with a few minutes' practice.

Potatoes, Corn, Etc.

In the FARMER of the 13th of January, "100 Acres" gave a very interesting article on growing late potatoes. I think he has the true plan. I have had good success for three seasons with mulched potatoes. If the ground is not too flat I should have no fear of watery potatoes, even in a wet season. He says he had one potato dropped in a place, etc., I would like to know whether the potatoes planted were large or small ones. If large, would not a part of a potato be as good as a whole one? I ask for information, as I have always cut my potatoes to two or three eyes to the piece.

Will J. M. B. of Fairview, Brown county, please explain his method of listing corn ground? Also, state whether a horse planter was used in planting? How many times was the corn cultivated? If 60 acres can be broken, re-broken, listed, planted, and tended by one man and team in 45 days' work, I want to know just how to do it.

If Louis Williams will feed his horses a small quantity of finely pulverized tobacco, say one teaspoonful to each horse, he will find that one or two doses will soon clear them of worms.

We have had a fine winter for feeding stock, and stock that has been well fed is in fine condition. Water is getting to be quite scarce; many wells failing to furnish the necessary supply.

Thermometer 20° below zero on the morning of the 14th ult. W. T. WALTERS, Emporia, Kas.

Farm Letters.

HAYS CITY, Ellis Co., 222 miles west from Topeka.—There is no farm news to chronicle, excepting so far as stock is concerned, which is generally in good condition, especially horses. We never before saw work teams in so high condition at this season in this western country. Upon inquiry, as to the cause the almost universal answer is, "rice corn." This grain is gaining favor daily, with those who are feeding it to any extent. It is considered by many superior to oats as horse feed, and also for sheep, being heavier than oats or corn, and not so heating as the latter. A large acreage will be sown the coming spring. We advise farmers to sow less wheat and raise a greater variety of crops, and by no means omit rice corn, of which we are quite sure of a partial crop, at least as demonstrated the past dry season. We wish to say a word on the subject of feeding horses, not only during the winter, but the year round. It is believed, and practiced by many, and we may say most farmers, that when not at work and standing in the stable, horses need to eat all day; at least we infer this, for whenever they see the manger empty hay is supplied at once. This is not in accord with my theory or practice. It must be admitted, we think, that a horse needs no more when not at work than when he works hard all day and gets only three meals at most. We believe a horse will do better in every way, both in health and flesh, when not at work, to be fed hay only morning and evening, with a little grain than to stand to it all day. We are glad to see some adopting this plan as we believe it to be to their advantage. Should like to hear from others on this subject through the FARMER.

The weather continues cold, with but little snow. The thermometer registered 31° below zero January 9th, and has been ten and twenty several times. The prospect for wheat is considered good yet by those who have examined it; even that which is not up seems in good condition and ready to come on as soon as warm weather and rain comes to its assistance. E. R. COLE.

LANGDON, Reno Co.—Since I wrote on December 17th we have had a great deal of cold weather. On December 29th the thermometer stood 13° degrees below zero in the morning, and 5° below the next morning and 2° the morning following. On Jan. 5th it was warm and misty till 11 a. m., when it got to a slow rain, increasing and changing to a fast falling snow by 2 p. m., which continued till nearly next morning. There was a mild south-west wind with the snow till about 3 p. m., when it suddenly changed to the north-west via east, and blew a tempest the rest of the afternoon and night. The air was filled with the falling and drifting snow. The snow drifts were three or four feet deep in places. I think the snow will average four or five inches in depth. We have had so much more cold weather and snow than usually here that the stock feed is likely to become scarce before grass comes as plentifully as it was in the fall. I am told that the cattle on the range south-west in this state and the Indian territory, are beginning to look badly, and some cattle and sheep have already died from the effect of the cold winter and the snow covering the grass, for none of our snows, till the last, drifted any. The fruit buds all seem safe yet. There is a heavy mist this morning, (the 7th of January) and the fruit trees and weeds are all covered with a fine, heavy frost. B. P. HANAN.

MANHATTAN, Riley Co., Kan. Jan. 24.—Corn in this section of the country was about half a crop. Winter wheat looks poor and bids fair to be a failure. There is perhaps more stock fed in Riley county than any

other county in the state—that is hogs and cattle. Almost all the old settlers agree that the peach crop is harvested for '81. There is little known in reference to the apple as it is more generally killed in the spring. Will the correspondent from Turkville, Ellis county, please tell us how wheat looks in his vicinity? Also the condition of things in general in that county. Why do not all counties report weekly? This is, without doubt, the coldest winter known to the oldest settler in Kansas.

I. A. M. WITHUE.

ELMDALE, Chase Co., 80 miles southwest from Topeka, Jan. 25.—This county was not mentioned in the wheat and corn crop report. Wheat was a virtual failure, averaging, perhaps, from 7 to 10 bushels per acre. The yield of corn was varied; average for county about 35 bushels per acre. The hay crop was very light, consequently a great deal of corn was cut up—rather a new departure for this vicinity.

More cattle are being corn-fed here this winter than ever before, and I suppose more than in any other county of the same population in the state.

Wheat is now in bad condition, most of it having been sown late, and is small. We have had many snow storms, but the snow all blew off, leaving the fields bare. Everything that is freezeable is frozen up solid, and water is very scarce on some plantations.

I have read much in the FARMER on "feeding calves in winter." I would say, for the benefit of my brother farmers, that the result of my somewhat extended observations and experiments is that calves will grow more and keep in better health on green winter pasture (say wheat sown early) than any other feed. When I first commenced the practice of winter-pasturing calves, some five years ago, people told me that they would get the black-leg, but I have not seen a sick calf nor a lousy one. If any one would wish my experience in detail, I would cheerfully give it, but there is not room enough for it in this letter.

I would like to hear the experience of the farming brotherhood on forest tree culture, especially on walnut, oak, hickory, and other trees of that kind. G. B. ALLEN.

[Give us your experience in feeding and managing calves, by all means.—Ed.]

WAKARUSA, Shawnee Co., 10 miles west of Topeka, Jan. 24.—The weather continues cold and dry although there have been several light snows since the first of the month, amounting in all to two and one half inches. The weather has been unusually cloudy. The temperature has been from 6 to 46° below freezing every morning this month except on the 20th, when it stood at freezing. It has been at and below zero four mornings. On the 9th the temperature was 14° below zero. The coldest day this winter was December 20th, it being 22° below zero. Ice on the streams is still water 18 to 20 inches thick. It has been somewhat troublesome to procure water for stock on account of the thickness of the ice, but those having stock wells have enjoyed seeing their cattle drink the warm well water from the trough. No farmer should be content without a good large well from which he can water all his stock in dry and cold weather. A stock well should be dug eight feet in diameter with a good wall inside and covered over with a tight platform made of two thicknesses of boards laid on so as to break joints, and well earthed up about the sides to prevent rabbits or anything else from getting into the water. The well should be dug deep enough for the water to stand from six to ten feet deep all the time and then there will be no lack of water for any reasonable amount of stock. Persons proposing to dig a well like to be tolerably certain that they will find plenty of water without going to a great depth. The most certain indication of water beneath the surface, that I know of, is to go out of a dewless morning, before the sun is up, and walk back and forth across the farm and there will sometimes be found narrow places where the grass and grain is wet, and if a well be dug in such a place plenty of water will be found without digging very deep.

A FARMER.

"And the Leaves Were for the Healing of the Nations."

This is fully exemplified in the demonstration that so common a pasture weed as smartweed, or water-pepper, possesses medicinal properties which, when combined with essence of Jamaica ginger and other efficacious vegetable extracts, is in Dr. Pierce's Compound Extract of Smartweed. It constitutes a most potent remedy for bowel affections, as diarrhea, dysentery, flux, etc. It is also an efficacious medicine for colds, and to break up fevers and inflammatory attacks, and for the alleviation of pain. Every family should keep a supply of it. 60 cents, by druggists.

For Sale!

Five hundred bushels of pure Early Amber Sorghum Seed. The seed has been selected with care and is for sale at bottom prices. Address A. Brown, Larned, Kansas.

The KANSAS FARMER, Weekly Capital, and American Young Folks, sent one year for \$2.50.

Skinner & Son, oldest shoe dealers in Topeka.

A Cough, Cold, or Sore Throat

should be stopped. Neglect frequently results in an Incurable Lung Disease or Consumption. BROWN'S BRONCHIAL TROCHES are certain to give relief in Asthma, Bronchitis, Coughs, Catarrh, Consumption and Throat Diseases. For thirty years the Troches have been recommended by physicians, and always give perfect satisfaction.

They are not new or untried, but having been tested by wide and constant use for nearly an entire generation, they have attained well merited rank among the few staple remedies of the age. Public speakers and Singers use them to strengthen the Voice. Sold at twenty-five cents a box everywhere.

Chas. C. Frary, of Adrian, Mich., says: To my complete surprise, I obtained a good night's rest the first night I wore an "Only Lung Pad." I have suffered from asthma for years.—See Ad.

Boy's Boots at Skinner's, \$2.00.

The KANSAS FARMER, Weekly Capital, and American Young Folks, sent one year for \$2.50.

Mothers! Mothers!! Mothers!!!

Are you disturbed at night and broken of your rest by a sick child suffering and crying with the excruciating pain of cutting teeth? If so, go at once and get a bottle of MRS. WINSLOW'S SOOTHING SYRUP. It will relieve the poor little sufferer immediately—depend upon it; there is no mistake about it. There is not a mother on earth who has ever used it, who will not tell you at once that it will regulate the bowels, and give rest to the mother, and relief and health to the child, operating like magic. It is perfectly safe to use in all cases, and pleasant to the taste and is the prescription of one of the oldest and best female physicians and nurses in the United States. Sold everywhere. 25 cents a bottle.

J. J. H. Gregory's Seed Catalogue.

Mr. Gregory's Catalogue (advertised in our columns) opens with several fine engravings of new vegetables, after which follows an immense variety of flower and vegetable seed, including 47 kinds of beans, 23 of beet, 54 of cabbage and cauliflower, 26 of corn, 28 of cucumber, 28 of lettuce, 41 of melon, 17 of squash, 24 of tomato, 36 of turnip, etc., etc., all fully described. Catalogues are advertised free to all.

Good Rubber Boots at Skinner's, \$3.50.

Rescued from Death.

William J. Coughlin, of Somerville, Mass., says: "In the fall of 1876 I was taken with a violent bleeding of the lungs followed by a severe cough. In the summer of 1877 I was admitted to the City Hospital. While there the doctors said I had a hole in my left lung as big as a half dollar. I was so far gone a report went round that I was dead. I gave up hope, but a friend told me of Dr. Wm. Hall's Balsam for the lungs. I got a bottle, when to my surprise and gratification I commenced to feel better, and to-day I feel in better spirits than I have for the past three years.

"I write this hoping that every one afflicted with diseased lungs will be induced to take Dr. Wm. Hall's Balsam for the Lungs, and be convinced that consumption can be cured."

The Barb Wire patents of Kelly, Hunt & Glidden having been sustained by the courts, no barb wires, unless licensed under them, can be sold or used without liability for damages. The Kelly Steel Barb Wire is now, as in the past, a legal wire, and most deservedly popular, and sold as cheap as other wires. The Thorn Wire Hedge Co., of Chicago (sole manufacturers), who receive an income from the patents, are justly deserving of their share in the results of the victory.

J. S. R. Scovill, Morris, Ill., says: When your "Only Lung Pad" came to hand, my son could not raise his head. He is now up and gaining every day.—See Ad.

Wool Growers.

Ship your Wool to W. M. Price & Co., St. Louis, Mo. They do an exclusive commission business and receive more wool than any Commission House in St. Louis. Write to them before disposing of your wool. Commissions liberal. Advances made. Wool Sacks free to shippers.

8 and 9

Eight and nine per cent. interest on farm loans in Shawnee county. Ten per cent. on city property. All good bonds bought at sight. For ready money and low interest, call on A. PRESCOTT & CO.

SHEEP. BARTHOLOMEW & CO.,

Breeders of, and Dealers in FINE MERINO SHEEP.

For Sale, fine Merino Breeding Ewes and thoroughbred Rams.

"CAPITAL VIEW SHEEP FARM," TOPEKA, KANSAS.

CANVASSERS Make from \$25 to \$50 per week selling goods for E. G. RIDGOUT & CO., 10 Barclay Street, New York. Send for Catalogue and terms.

Markets.

TOPEKA MARKETS.

Produce.	
Grocers retail price list, corrected weekly by W. W. Manspeaker. Country produce quoted at buying prices.	
NEW CABBAGE—per doz	.50@.60
NEW BEETS	.40
BUTTER—Per lb—Choice	.15@.18
CHEESE—Per lb—Fresh	.15
EGGS—Per doz—Fresh	.30
BEANS—Per bu—White Navy	1.50
" " Medium	1.75
" " Common	1.50
E. R. POTATOES—Per bu	.75
P. B. POTATOES—Per bu	.75
S. POTATOES	1.00
TURNIPS	.40
APPLES	.50@.75

Butchers' Retail.	
BEEF—Strain steak per lb.	12 1/2
" " Round " "	10
" " Roasts " "	10
" " Fore Quarter Dressed, per lb.	6
" " Hind " "	6
" " By the carcass " "	6
MUTTON—Chops per lb.	10
" " Roasts " "	10 1/2
PORK	12 1/2
VEAL	12 1/2

Hides and Tallow.	
Corrected weekly by H. D. Clark, 135 Kansas Ave.	
HIDES—Green	.06
" " No. 2	.06
Green, calf	.07
do frozen	.06
Bull and stag	.06
Dry salted prime	.13
Dry salted, prime	.10
Dry damaged	.06 1/2

TALLOW.	
SHEEP SKINS	.25@.30
Poultry and Game.	
Corrected weekly by McKay Bros., 245 and 80 Kansas Avenue.	
CHICKENS—Live, per doz.	2.50@3.00
PRAIRIE CHICKENS	2.25@2.50
WILD DUCKS	1.75@2.00
MALLARD, per doz	1.00@1.25
SQUIRRELS	.60
RABBITS	.60
JACK RABBITS	2.40

Wholesale cash prices by dealers, corrected weekly by Edson & Beck.

Grain.	
WHOLESALE.	
WHEAT—Per bu. No. 2	.80
" " Fall No. 3	.75
" " Fall No. 4	.70
CORN—Yellow	.28
" " New	.30
OATS—Per bu. new	.30
RYE—Per bu.	.50
BARLEY—Per bu.	.50
RETAIL.	
FLOUR—Per 100 lbs	2.90
" " No. 2	2.70
" " No. 3	2.40
" " Rye	2.50
CORN MEAL	1.00
CORN GOLF	1.25
RYE CHOP	1.75
CORN & OATS	1.00
BRAN	.60
SHORTS	.70

WOOL MARKET.

Chicago.

Tub-washed, good medium, 44 to 46c; tub-washed, coarse and dingy, 35 to 42c; washed fleece, fine heavy, 38 to 39c; washed fleece, light, 38 to 40c; washed fleece, coarse 31 to 38c; washed fleece, medium, 40 to 42c; unwashed, fine 24 to 27c; unwashed, fine heavy, 18 to 22c; unwashed medium 28 to 31c; unwashed coarse, 21 to 26c.

St. Louis.

Quiet and easy. We quote: Tub washed—choice 45 to 46c, fair at 44 to 46c, dingy and low 37 to 38c, lamb 42 to 40c, fleece washed 38 to 39c, unwashed—choice 28 to 28c, inferior at 26c for very poor to 27c for fair, Kansas at 22 to 26c, Texas 25 to 26c, merino—light fine at 20 to 22c, heavy do at 17 to 18c. Southern burry sells at 12 1/2 to 14c. Burry, black, cottoned, etc., 5 to 10c off. Salts: small lot burry unwashed at 22c, 4 sbs tub washed at 45 to 46c.

Markets by Telegraph, February 7.

New York Money Market.

GOVERNMENT BONDS.	
Coupons of 1881	101 1/2
New 5's	101 1/2
New 4 1/2's registered	112 1/2 to 113
New 4's registered	112 1/2 to 113
Coupons	113 1/2 to 114

SECURITIES.	
MISSOURI SIXES—\$1 08 1/2	
ST. JOE—\$1 07	
PACIFIC SIXES—95 1/2	
CENTRAL PACIFIC BONDS—firsts, \$1 13	
UNION PACIFIC BONDS—firsts, \$1 14	
LAND GRANTS—\$1 14	
SINKING FUNDS—\$1 23 1/2	

Chicago Live Stock Market.

The Drovers' Journal reports as follows: HOGS—Receipts, 30,000; shipments, 2,800; good demand, prices advanced 5c; mixed packing, \$4.70 to 5.00; light, \$4.80 to 5.00; choice heavy, 5.00 to 5.30; dressed strong. CATTLE—Receipts, 1,500; shipments, 360; brisk, active, market 10 to 15c higher, no exports here; good to choice shipping, 4.80 to 5.40; common to fair, 3.90 to 4.80; butchers' firm; common to choice, 2.00 to 2.30; stockers strong, 2.80 to 4.00. SHEEP—Receipts, 200; shipments, 370, 15 to 20c lower; fair, 4.00 to 4.25.

Liverpool Market.

[By Cable.] BREADSTUFFS—Market unchanged. FLOUR—9s to 12s. WHEAT—Winter, 9s 9d to 10s 9d; spring, 8s 6d to 9s 9d. CORN—5s 6d to 5s 6 1/2d. OATS—6s 2d. PORK—66s. BEEF—74s. BACON—Long clear middles, 88s; short clear, 41s. LARD—Cwt, 46s.

Chicago Produce Market.

FLOUR—Steady and unchanged. WHEAT—Quiet and weak. No. 2 red 97 to 98c; No. 3 spring, 95 1/2 to 97c cash; 95 1/2c February; 99 1/2c Mar. CORN—Good demand at full prices; 37c cash; 37 1/2c February; 42 1/2c May. OATS—Fairly active and higher; 37 1/2c cash; 37 1/2c February; 42 1/2c May. RYE—Steady and unchanged; 88 to 90c. BARLEY—Firm; 104. BUCKWHEAT—Active and higher; 13 3/4 to 13 3/5 cash 13 3/4 to 13 3/5 February; 13 3/4 to 13 3/5 March. LARD—Active, firm and higher; 88 1/2 to 88 3/4; 89 1/2 to 89 3/4; 90 1/2 to 90 3/4. BULK MEATS—Good demand and higher; shoulders, 4 1/2; short ribs, 7 1/2; short clear, 7 1/2.

Kansas City Produce Market.

The Commercial Indicator reports: WHEAT—Receipts, 28,546 bushels; shipments, 14,225 bushels; in store, 367,811 bushels; market weak and slow; No. 1, 95c; No. 2, 87c bid; No. 3, 81 1/2c. CORN—Receipts, 6,506 bushels; shipments, 2,821 bushels; in store, 291,624 bushels; market weak and slow; No. 2 mixed, 29 1/2c; No. 2 white mixed, 30c. OATS—No. 2, 31c bid; 31 1/2c asked. EGGS—Market more active; 22 to 23c per dozen. BUTTER—Market firm at 17 to 18c.

Kansas City Live Stock Market.

The Commercial Indicator reports: CATTLE—Receipts, 180; shipments, 176; market weak and slow; native steers, averaging 1,200 to 1,411 pounds sold at 4.00 to 4.25; cows, 2.50 to 3.00. HOGS—Receipts, 1,614; shipments, none; market firm and 5c higher; sales ranged at 4 1/2 to 4 3/4; bulk at 4.50 to 4.60. SHEEP—Receipts, none since Saturday; shipments today, 195; market steady; natives, averaging 96 lbs. sold at 8 50.

St. Louis Produce Market.

FLOUR—Unchanged. WHEAT—Dull and easy; No. 2 red, 1 02 1/2 cash and January; 1 03 1/2 to 1 03 3/4 February; 1 06 to 1 06 1/2 March 1 07 to 1 07 1/2 April; 1 08 1/2 May; No. 3 do, 95c; No. 4 90c. CORN—Dull and lower; 40 to 39 1/2c cash and January; 39 1/2c February; 39 1/2 to 39 3/4c March; 40 1/2 to 40 3/4c May. OATS—Dull; 31 1/2 to 32c cash; 33 1/2c bid March. PORK—Higher; 13 3/4 cash and bid February; 13 40 bid March.

Denver Market.

FLOUR, GRAIN AND HAY. MAY—Upland, 28 to 29; second bottom, 21 to 22; bottom hay, 20; Kansas baled, \$19 to 20.00. FLOUR—Colorado, \$3.00 to 3.50; Kansas, \$3.10 to 3.20. GRAHAM, \$3.00 to 3.10. MEAL—Bolted corn meal, \$1.60, WHEAT—new \$2.25 cwt. CORN—1 15 to 1 22 cwt. OATS—Colorado, \$2.00 to 2 10; state, \$1.80 to 2 00 cwt. BARLEY—2 00 to 2 35 cwt. PRODUCE, POULTRY VEGETABLES: EGGS—Per dozen, ranch 40c firm; state, 35c. BUTTER—Ranch, P. B. 30 to 32c; creamery, 36 to 37c; cooking, 10 to 20c. OILS—No. 1 to 4 1/2. CHICKENS—der doz, old, \$4.40 to —; young, 12 1/2c per b.

St. Louis Live Stock Market.

HOGS—Strong and better! Yorkers and Baltimores, 4 00 to 4 75; packing and Boston's, 4 00 to 5 00; butch-

A SPECIAL OFFER. BEATTY'S ORGANS ONLY \$85.

A \$450 17 Stop Cabinet or Parlor Organ for only \$85 cash.

ONLY \$85.00. 17 STOPS.

5 SET GOLDEN TONGUE REEDS.



advertisements, there are sure to recommend themselves so high that after 25 sales are traced from the first one sold. My Holiday Offer are extended until April 30th. Remittances may be made by Bank Draft, Post Office Money Order, Express Prepaid or Registered Letter. Please send reference or some evidence of your credit in the future. This offer is good for cash only. Address or call on DANIEL F. BEATTY, Washington, New Jersey.

Most Points to the Pound. One Pound to the Rod. Lightest. Strongest. Rust Proof.

Steel Wire. Steel Barb. Sharp Point. Oil Paint. Patented 1868, and licensed under all Patents. SUSTAINED BY THE COURTS. Kelly wire now sold cheap as any wire made under the Patent. One dealer only wanted in each town. THORN WIRE HEDGE CO., Sole Manufacturers, Chicago, Ill.

ers to fancy, 5 00 to 5 20; receipts, 8,800; shipments, 3,400. CATTLE—Good supply and demand fair; export steers 5 25 to 5 50; good to choice shipping, 4 75 to 5 15 fair to good 4 35 to 4 70; light, 4 00 to 4 25; butchers' steers, 3 00 to 4 00; cows and heifers 2 50; stockers 2 75 to 3 25; receipts, 1,300; shipments, 750. SHEEP—Supply liberal and movement slow, with downward tendency in prices; receipts, 1,400; shipments, none.

Concord Grape Vines.

Hedge Plants, Gregg Raspberry, and a general Nursery Stock. Price Lists free. KELSEY & CO., Nurserymen, St. Joseph, Mo.

NOTICE.

Notice is hereby given that the firm of A. H. & A. C. Griesa of Kansas Home Nursery has been dissolved by mutual consent. The well known grounds west of the city on California road will hereafter be known as the MOUNT HOPE NURSERIES, where a full line of trees, &c., can be found at all times. A. C. GRIESA, Lawrence, Kas.

2,806 Lbs. Weight of two Ohio Improved CHESTER WHITE HOGS. Send for description of this famous breed and sowls. L. B. SILVER, Cleveland, O.

THE NEW SHEEP DIP.

LITTLE'S CHEMICAL FLUID.

All doubts as to the efficacy, and safety, of this new and wonderful remedy for scab, and sore eyes in sheep, having been effectually exploded, by practical test; during the past two months, no one need hesitate to use it.

In Cold Weather, in Cold Water, at any season of the year. It has more than vindicated every claim that has been made for it, and numerous testimonials can be furnished in proof of this fact, two thousand gallons could have been sold the past two months if I could have secured it. I have now seven barrels on hand, and the General Agent, T. W. Laidlaw, P. O. Box 504, Baltimore, Md., has promised to buy me sufficient in the future. This fluid is a safe and sure cure for foot rot, kills ticks on sheep, lice on cattle, and all internal and external parasites. Send 3 ct stamp for circulars and testimonials. JAMES HOLLINGSWORTH, 210 LaSalle St., Chicago, Ill.

PERSONAL. Extract from a private letter to J. H. Zellin & Co. —I write you this note to congratulate you on being the proprietor of the best Liver Medicine (Simmons Regulator) known to the human race. I have known it for a number of years, and I pronounce it, as prepared by you, pure and genuine; and I pray you, for the sake of humanity, to keep it so. You may prepare and recommend it, but you will never know the value of it unless you have a disordered liver yourself. It unclogs the liver of impurities with which it has been clogged for years, and puts the wheels in their original motion. "Simmons Liver Regulator. I believe to be one of the best remedies for a deranged liver that I have ever tried. It has benefited my wife more than any medicine she has taken for that disease. I believe it 'me plus ultra.' J. B. RANDALL, M. D. "Beckham P. O., C. R. R., Ga."

FOR SALE.

100 head of first-class cows; 2,500 sheep, coarse wool crossed with Merino. Six months time, delivered now or on grass. For further information, address A. M. CARPENTER, N. Topeka, Kas.

PIMPLES. Blackheads, Fleas, Worms and Greasy Skin. Medicated Cream, "the best and only known perfect, pleasant, easy and absolute remedy. Without injury to complexion, it enters for good, clean, completely and in a few days only—leaving skin clear, smooth and unblemished always. Remedies of this kind, effective and satisfactory cures received by nearly every mail. Never fails. If not satisfied money promptly refunded. Mailed in plain wrapper, for 50 cents in stamps. Dr. Geo. N. Stoddard, 1226 Niagara St., Buffalo, N. Y. Sent Exactly as represented, and the doctor re-ble.

Send for catalogue. Address TRUMBULL, REYNOLDS & ALLEN, Kansas City, Mo.

THE BEST LEATHER QUARTER, STEEL BOW, FULL STITCHED, BACK TOP BUGGY IN THE MARKET FOR \$80. WARRANTED.

The best side spring open buggy in the market for \$65.

The best platform wagon in the market for \$30.

The best 3 spring wagon in the market for \$85.

We also have fine full leather top Buggy, Phaetons, Carriages, at as favorable Prices as any house in the country.

Send for catalogue. Address TRUMBULL, REYNOLDS & ALLEN, Kansas City, Mo.

Eggs, Eggs, Eggs. From my superior strains of Light Brahmas and Plymouth Rocks. 1 pack Eggs in the best Improved Basket, and pack to go any distance. I will in all cases where a failure is reported duplicate the sitting. My stock is now the finest west of the Mississippi. Send for circular (illustrated) and price list. Address SANFORD L. IVES, Mendota City, Linn Co., Ia.

Literary and Domestic

The English Sparrow.—No. 2.

PASSER DOMESTICUS.

From what I have been able to learn about this bird it not only fails to be particularly useful as an insect destroyer, but it has two bad habits that will make it an unwelcome visitor among us. These are, first, its grain-eating habits, and second, its quarrelsome disposition that results in driving away many of our more useful birds.

The dissections that have been made by Maynard and others prove conclusively that the sparrow is a grain eating bird, grains, seeds and small stones making up the bulk of the contents of those birds examined by them. These birds are exceedingly prolific, multiplying very rapidly—one female was known to lay thirty-five eggs in as many days—so that when once established in our western grain fields, they will soon exist in such numbers as to prove a source of immense loss.

One of the most common complaints made against this bird is its habit of driving away or destroying our native song birds, which largely feed on insects. I will offer the testimony of some who have made the acquaintance of this little European in this matter.

E. A. Samuel, in *Boston Transcript*, says: "The English sparrow has driven away all our pretty, interesting, and musical birds."

E. Canes, in *Field and Forest*: "Whatever may be said to the contrary notwithstanding, these sparrows do molest, harass, drive off, and otherwise maltreat, and forcibly eject and attempt to destroy various kinds of native birds, which are thereby deprived of certain inalienable rights to life, liberty, and the pursuit of happiness after their own fashion." Anon N. Y. *Herald*: "E. Canes is right. He points out what is known to be true by every observing farmer near New York, that the sparrows are gradually driving away all the native birds."

"Major," in *Rural New-Yorker*: "The city people knew when they imported the greedy, fighting, songless sparrow, that they were introducing one pest to exterminate another."

A. B. Lomberton, *American Sportsman*: "I am fearful lest they do much towards driving away from our cities our best and sweetest song birds. It is high time for us to declare war against the foreign intruders."

S. Aughey, Rep. U. S. Ent. Com.: "Several persons have advocated the introduction of the English sparrow in Nebraska, in order to mitigate our insect plagues. Such a policy, it appears to me, would be highly objectionable. Where I have seen this bird in America, it has gradually driven away our native birds. Some years ago the English sparrows were introduced into Nebraska City, and have multiplied to a considerable extent, but the number of species of insects that they feed on, as has been anticipated, has been found to be small. This, of course, could have been endured if they were not so hostile to other birds, native to the soil, that do much better."

"J," in the *Washington Post*: "The sparrows are an increasing pest. If there is a law to protect them it should be repealed, and the sparrow nuisance abated."

W. J. Hoffman, *American Naturalist*, testifies to the repeated destruction of robins' nests by the sparrows.

R. L. Newcomb, in *The Country*, (N. Y.) produces unequivocal evidence of decrease in numbers of native birds since the sparrows became numerous.

These testimonies, which might be greatly multiplied, are certainly unequivocal as to the quarrelsome disposition of this bird. Our song birds, in this prairie country, are far too few, and to introduce one that neither sings nor eats insects to any important extent, would certainly be little short of a public calamity, especially when that bird is a great destroyer of grain.

In further evidence of the general bad character of this bird, I offer the following:

The Nuttall Ornithological Club, of Mass., devoted a meeting to the discussion of this bird. Its members are professional ornithologists, and others interested in the bird question. After a full and free discussion of the subject, "At the close of the discussion a vote was taken on the question of whether or not, in the opinions of those present, the farther increase of the house sparrow in this country was desirable. The result was a unanimous negative."

"S," in the *Country Gentleman*: "These pests alighted upon a field of corn, tore open the ends of the ears with their strong bills, and fed on the soft grain. In this way nearly every ear over a large portion of the field was damaged before it became too hard for them to operate upon."

F. Muench, in the *Rural World*: "Nothing eatable, if possibly accessible, is secure from his attacks—garden products, as well as all kinds of fruits, cherries, and grapes in particular; wheat fields. What barns, stables and houses contain, if not carefully guarded, will become his prey."

A few defend the bird, generally from their knowledge of it in Europe, but it seems that in coming to America its habits have so changed that from a harmless pet it has become an unmitigated nuisance that ought to be abated by the "shot-gun policy." L. J. TEMPLE.

Yankee Girl Home Again.

Since my return from the east I have missed your weekly visit at Willow Glen. Inquiring the cause found the time paid for had expired, which was a very good reason, though I think we can ill afford to lose so well paying and

profitable a messenger. I do not say this in flattery, for only fools feed on that. The information gained on many subjects of farm work, together with the experience given of those in care of crops and cattle raising, has been of great value to us on our new farm. Then the discussing of "Poultry Raising," also the various "household hints," recipes, etc., one of which was, How to Make Vinegar. I tried it three years ago and have never bought any since, for what I make is of far better quality, as near like cider vinegar as possible. We also miss the FARMER in our evening reading. In fact we feel that we must not lose the best way of knowing what is going on in the different parts of our state, and the prosperity of all the farming fraternity.

We like to keep sight of Bramblebush, with her useful articles, also the letters of American Girl and Kansas Girl, we miss. Then one other thought—we like to send it often to some of our many friends east, that they may gain some substantial facts with regard to the different counties of our state. Many, when I left, said, Send me the FARMER now and then. And, by-the-way, I saw some Kansas corn grown in Massachusetts, that was over twelve feet high. It was not grown, though, without fertilizers.

I did intend to be very brief, but one thing more: I wish to inquire of the many readers of the FARMER if there is, in any locality of our state, such a gathering as a farmers' club? I think that such a society has greatly advanced and helped to elevate the farmer and the farm in the east, and I do not see why it could and should not here. I will send you, Mr. Editor, a report of one or two of their meetings, and see what you think.

Now I send you the *wherewith* to continue us friends for the present, unless this offends you. YANKEE GIRL.

Window Gardening.

To secure perfect success in window gardening, plenty of room is an absolute necessity. If twenty plants are crowded into a space that is just sufficient for ten, even if they thrive at first they will finally elbow and overshadow each other out of all shape and beauty.

Don't be too ambitious and attempt too much in endeavoring to succeed. Ordinary window plants and choice hot-house species will not grow in the same atmosphere. It is all folly to make the attempt. When all true flower lovers have learned this lesson there will be fewer disappointments.

Among the most satisfactory and easily cultivated are the zonal geraniums. Some of the new dwarf varieties are especially adapted, being compact and dwarf in their growth, have beautiful foliage and are free bloomers. Among the old varieties none excel Gen. Sheridan, Beauty of the West, Master Christine, Gen. Grant, Bicolor and White Vesuvius. Among the nearly endless variety of double flowering geraniums few can compare with Professor Asa Gray, Bishop Wood and Jewel. Some of the foliage varieties are very beautiful, and do first-rate in a window which has only partial sunlight.

A good, healthy two or three year-old heliotrope will bloom better and more abundantly than a young one. A couple of healthy plants of fuchsia speciosa and Carl Holt will make the window gay all winter. A white and also purple double petunia will prove constant bloomers. Ageratums, both the blue and the white, are among the necessities of a winter garden.

A few ever-blooming roses must not be forgotten. Louis Philippe, Devoniensis, Isabella Sprunt, Jean Sisly, Bougere and Carolina Cook are all vigorous growers and fine for winter flowering.

Begonias will produce flowers in great abundance during the winter months. The best and most satisfactory are Incarnata, Saundersonia and Weltoniensis.

Cyclamen persicum, Cuphea platycentre, Jasminum revolutum, Mahonia odorata and Plumbago capensis are the cream of the greenhouse winter flowering plants.

Ladies whose means are limited can have their taste for the beautiful gratified by selecting hardier flowering plants than those mentioned above. Plants of verbena, pansy, sweet alyssum, mignonette, oxalis, carnation, spirea japonica, deutzia gracilis, chrysanthemum, bleeding heart, and some of the hardy ferns will make the farmer's and artisan's cottage window "a thing of beauty" without the aid of a "base burner." If the room is kept a few degrees above the freezing point, say 40 degrees, these plants with their beautiful foliage and hundreds of smiling little blossoms will bloom without intermission all winter, and will amply repay all the care the mistress of the house can give them. Ladies, try them and see the result!

Book Notices.

SEED CATALOGUE.

We are in receipt of Mr. Joseph Harris' Catalogue of Farm, Garden and Flower Seeds for 1891. Mr. Harris is a comparatively new man in the seed business, but he is an old farmer and seed grower. He has a fine farm of about 300 acres near Rochester, N. Y., in the highest state of cultivation, and ought to be able to furnish his customers with good seeds at reasonable prices. He offers to send his catalogue free to all applicants. Address Joseph Harris, Moreton Farm, Rochester, N. Y.

A LADY INVENTOR.

We admit they are rare, but occasionally one appears, and when this happens she generally excels. Mrs. Frances Dunham is one of these

feminine geniuses who has succeeded in inventing the best comb foundation machine manufactured. She sends us a copy of her catalogue describing her machine which is as unique, tasty and as different from other catalogues as well can be, giving price of machines, foundation, and other bee-keepers goods. Her address is De Pere, Brown Co., Wis.

THE RED BOOK

of the Baltimore & Ohio railroad. This little book strikes the eye at a glance, by its brilliant red, black and white binding, and its remarkable neatness in every particular. The aim of the work is to present the returns of the late election, and is a complete political text book. The second edition gives the returns of the late presidential election, showing the returns by counties in each state. The New Red Book, however, intersperses the election statistics with the history and progress of that great railway, which, under the enlightened management of Mr. Garrett, is a model of what a railroad should be.

The New B. & O. Red Book, while not for careless or indiscriminate circulation, will be sent without money and without price to all who care to write for it to C. K. Lord, Baltimore, Md. The enclosing of a three cent stamp will pay the postage, and the book will be sent promptly upon application.

ENSLAVER OF GREEN CROPS.

A new edition of the work on ensilage by B. Brown, has been published by the New York Plow Co., 55 Beekman st., N. Y.; price \$1.00. This system of preserving green fodder is attracting much attention, and bids fair to be practiced extensively by eastern farmers and feeders, but it will not attain in the west. This is a useful book for any farmer to study whether he proposes to adopt the system or not.

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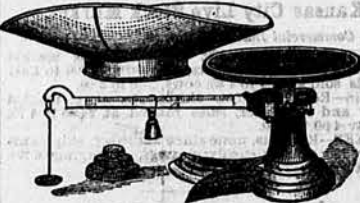
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In answering an advertisement found in these columns, our readers will confer on us a favor by stating that they saw the advertisement in the Kansas Farmer.

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160 Acres Land for \$1000
New farm, all fenced, 30 acres wheat, timber, water, and pasture, four miles from V. Falls. Address CHAS. O. GOOD, Valley Falls, Kas.

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For 1891 is an Elegant Book of 190 Pages. One Colored Flower Plate, and 600 Illustrations, with Descriptions of the best Flowers and Vegetables and Directions for growing. Only 10 cents. In English or German. If you afterwards order seeds deduct the 10 cents.

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FOR SOWING ALL KINDS OF SEEDS AND GRASSES. This machine does as much work as 5 men can do by hand, and does better work than can be done by any other means whatever. No more sowing too much to the acre. Agents wanted in every county in the United States. Price \$4. Horse Power Sower, price \$10. Send stamp for circular. We carry a large stock of fresh, choice Garden and Flower seeds. Send for catalogue. GEO. W. BROWN, 142 Lake St., Chicago, Ill.

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are always warranted, being exclusively of our own growth. Best for the Garden. Best for the Merchant. BECAUSE RELIABLE. They never fail to produce the finest vegetables, and are planted in all parts of the world. The constant improvement and care in their growth, extending over a period of more than half a century, have brought Buist's to a state of perfection and reliability second to none. BUIST'S GARDEN MANUAL for 1891 (12 pages of useful information, and 30 stamps. Wholesale Price Current for Merchants on application. ROBERT BUIST, Jr., Seed Grower, Philadelphia, Pa.

Best-Root Sugar.

ITS MANUFACTURE IN DELAWARE—SATISFACTORY PROGRESS MADE.

The manufacture of sugar from beets, which was undertaken in Delaware in 1879, is making satisfactory progress towards success, and should prompt Maryland farmers to try beet growing. With the enlargement made to the works there is a new capacity for using up sixty tons of beets in a day, but the major part of the machinery is fitted for the reduction of two thousand tons a day. Up to this time the entire plant, including the machinery (all made in this country) has cost about \$100,000. The buildings are on the bank of the Delaware, with a good wharf in front, and to the rear is the Philadelphia, Wilmington and Baltimore Railroad tracks, so that the beets can be received either by water or rail, and the produce shipped with equal facility. Last year the arrangements for growing beets were on a large scale, but the drought and ravages of insects rendered the crop almost a complete failure. Only about one thousand tons of beets were received from about half that number of acres. Some of the beets were, however, very rich in sugar. One farmer, E. C. Fennimore, of Odessa, in New Castle county, has raised beets with 10, 11 and 12 per cent of saccharine matter right along, and averaged over ten tons to the acre, last season, in spite of the drought. He regards the crop now as one of his best, and will put in this year either fifty or one hundred acres, expecting, with fair weather, to get fifteen tons per acre. The difficulty it may be remarked, on the side of the farmers is not so much as had been expected, in getting a good quality of beets as in raising enough in quantity, and this is an obstacle more easy to overcome than the other. About 100,000 pounds of a fine quality of light brown sugar are made, and also fifty barrels of "A" white sugar (which were sold in Wilmington for retailing by grocers): 6,300 gallons of inferior molasses retained, which was sold to the shoe blacking makers, and the beet refuse found a prompt sale at the factory door, at one dollar a ton. It is worth, according to experience, about double that to dairymen and other stock feeders. The company means to push things this season. It wants to work up 15,000 tons of beets, and will contract with farmers for cultivating something like 2,000 or 2,500 acres of beets. Any good wheat land, its officers say, will raise good beets, and as Delaware produces splendid wheat in a large part of her area, there can be no doubt that the beet crop will presently grow to be a very important one. Beets that will give anywhere about 9 per cent of sugar are regarded as suitable for the purpose. The company's executive officers express themselves as well satisfied with their American machinery. Notwithstanding the low wages of Europe, they are convinced that, with the several labor-saving appliances which they use, they can defy any German factory to compete with them in cheapness of operations as well as in mechanical results. They have, doubtless, the most complete beet sugar factory pure and simple; in the United States, and look forward confidently to the future, believing that they have now reached the point where the farmers will take hold of beet raising themselves as a source of regular and safe profits.—*Cecil Whig.*

The Cross-Cut Saw.

Ten years' experience in the use of cross-cut saws has proved to me that I have been working under many disadvantages until recently. My wish is for all to know the great advantage of a plan which I pursue.

Take a new saw that has never been set, place it between two boards cut to fit the saw, clamp it tight on a bench or vice; take an iron wedge, file one corner to suit the set of the tooth when finished, then take a small hammer, hold the wedges with the left hand, strike the tooth lightly with the hammer until at the right place, then turn the wedge on the opposite side, and on the next tooth, and set in the same way; now then you reach the third and most important tooth in the saw; leave it perfectly straight; pass on to the fourth tooth, set as you did the first; turn the wedge, set the fifth the same way; leave the sixth straight, and so on till you finish. Now take your file, dress your two teeth as you do the common saw; the third file perfectly straight and square, leaving it about one-twentieth part of one inch shorter than the others. Continue in this way until you finish, and you will find it will cut twice as fast as the old way practiced by most of the farmers.—*Southern Cultivator.*

After people have for a long time been raising hogs to sell in the large markets for three or four cents a pound, the belief that six cents will be the current figure before next summer shall have come, does seem a trifle visionary—too good to be true. But there are old heads in the business here who declare such a happy state of the market may be reasonably hoped for. They base their opinion upon the fact that hogs have been fairly crowding to market ever since the opening of the current season, and that packers have been taking the stock freely at prices ranging from \$4.50 to \$4.80. They agree that packing will not be likely to change their usual course so far as to neglect to put prices of hogs up materially, that they may have good reason for putting prices up on the accumulation of hog products, after they shall have filled their store-rooms. In this they will probably be greatly aided by the farmers and shippers of live-stock who seem, if the movement of the hog crop may be taken as a trustworthy indication, eager to clear the

country of hogs. With the greater part of the crop in their own hands, packers could afford to bull the market for hogs. It is, of course, possible that they may not see fit to do so, and it may be that even if they should advance prices six cents may be far above their ideas.—*American Stockman.*

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Because we allow these great organs to become clogged or torpid, and poisonous humors are therefore forced into the blood that should be expelled naturally.

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Patrons of Husbandry.

NATIONAL GRANGE.—Master: J. J. Woodman, of Michigan; Secretary: W. M. Ireland, Washington, D. C.; Treasurer: F. M. McDowell, Wayne, N. Y. EXECUTIVE COMMITTEE.—Henry James, of Indiana; D. Wyatt Allen, of South Carolina; W. G. Wayne, of New York.

KANSAS STATE GRANGE.—Master: Wm. Sims, Topeka, Shawnee county; O. John F. Willis, Grove City, Jefferson county; L. Samuel J. Barnard, Humboldt, Allen county; Secretary: George Black, Olathe, Johnson county.

EXECUTIVE COMMITTEE.—W. H. Jones, Holton, Jackson county; P. B. Maxson, Emporia, Lyon county; W. H. Toothaker, Olathe, Johnson county.

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.

Constitution of the Kansas State Farmers' Alliance.

ARTICLE I.

This body shall be known as the State Farmers' Alliance of Kansas, with power to make its own constitution and by-laws, provided they do not conflict with those of the National Alliance.

ARTICLE II.

The officers of this alliance shall be a president, a vice-president from the state at large and one from each congressional district, a secretary and treasurer, who shall perform the duties of such officers as prescribed in Cushing's Manual. After the first election, the officers shall be elected at each annual meeting, and hold their offices for one year, or until their successors are elected and duly qualified.

ARTICLE III.

There shall be a finance committee composed of three members named by the president, subject to the approval of the alliance, who shall audit all bills before they are paid, and shall examine the books and accounts of the treasurer and report as to their condition on the day of the annual meeting. When the finance committee have endorsed a bill favorably, the treasurer shall pay it unless objection is made after the secretary has publicly announced that such a bill has been presented. If objected to a vote of the alliance shall be taken on the payment of the bill.

ARTICLE IV.

This alliance shall meet annually on the first Wednesday after the first Monday in September, every year, and elect representatives to the National Alliance, and transact such other business as may come before the alliance.

ARTICLE V.

Seven members shall constitute a quorum for the transaction of business, but less than that number can call this State Alliance together and adjourn to meet at some future time.

ARTICLE VI.

The object of this organization shall be to unite the farmers of the state for their protection against class legislation and the encroachment of concentrated capital and the tyranny of monopoly; to provide against imposition by swindlers and swindling advertisements in the public prints; to oppose in our respective political parties, the election of any candidate to office, either state or national, who is not thoroughly in sympathy with the interests of the farmers; to demand that the existing political parties shall nominate farmers or those who are in sympathy with them, for all offices within the gift of the people, and to do anything in a legitimate manner that may serve to benefit the producer.

ARTICLE VII.

The president shall sign charters and preside at all meetings of the State Farmers' Alliance, when present at the meetings. The vice-president may sign charters as acting president, and shall preside in the absence of the president.

The secretary shall keep a record of the proceedings of each meeting, shall notify subordinate alliances of the proceedings of the State Farmers' Alliance; shall answer any questions as to the state of the market, or the furnishing of any individual or firm which upon inquiry he may be able to do, from any knowledge he possesses, and when requested by the secretary of any local alliance, use all his influence to protect and promote the interests of the members of this organization. The treasurer shall hold any funds that may come into his hands, subject, however, to the order of this alliance.

ARTICLE VIII.

The numbers of this alliance shall consist of the acting officers and one legally elected delegate from each subordinate alliance in the state.

ARTICLE IX.

Each subordinate farmers' alliance shall, at their last meeting in August, of each year, elect one delegate to the State Farmers' Alliance. The name and address of such delegate must be sent to the secretary of the State Farmers' Alliance so soon as practicable after his election, and certified to by the secretary of the alliance that elects him.

ARTICLE X.

This constitution, and the by-laws annexed, may be amended by a two-thirds vote in the affirmative of all the members present at any meeting.

BY-LAWS.

1. The secretary shall have prepared, at the opening of the State Alliance, a role of all the members who are duly credited as delegates to the State Alliance.
2. Order of exercises: 1. Called to order.
2. Roll-call.
3. Reading minutes of previous meeting.
4. Reading all communications from National, State, or subordinate alliances and individuals.
5. Reports of committees of all kinds.
6. Unfinished business.
7. Election and installation of officers.
8. New business.
9. Miscellaneous exercises.
3. No member shall speak longer than fifteen minutes nor more than twice on the same subject without the consent of the alliance.

2. All meetings of this alliance shall be public unless otherwise ordered.

3. The secretary shall receive and receipt for all monies and turn them over to the treasurer, and take his receipt.

4. The secretary shall receive as compensation for his labors the sum of \$300 per year.

5. The president and secretary can call a meeting of the State Alliance whenever, in their judgment, it is necessary for the good of the order.

6. The secretary is authorized to issue charters to any subordinate alliance in this state, making the proper application accompanied by the necessary fee, which shall be \$1.

7. That the secretary be and is hereby authorized to purchase all books and papers necessary for the business connected with the alliance and to get all the necessary printing done.

Co-Operation.

On this subject Prof. Ward, of the Agricultural college publishes the following interesting article in that sprightly little paper issued by the printing department of the college, the *Industriatist*. Every farmer ought to make himself familiar with the principles of co-operation and learn to apply them more and more in his business.

CO-OPERATION A CREATION.

Thomas Hughes, in one of his addresses, quotes a remark of a friend of his, as follows: "In my case, our system of co-operation is literally a creation. It makes something out of nothing, without work or effort or sacrifice on the part of members." This is an extravagant statement, and yet it is shown to be true. In 1860, this gentleman paid a single pound for a share in a co-operative store in Manchester, purchased his family supplies at the same store, withdrawing no dividends, which were quarterly paid to stockholders. In 1873, he wanted money; and, to his surprise found fifty-three pounds standing in his credit on the books of the association. Thus, his one pound had gained more than five times ten pounds, with "no work or effort or sacrifice on his part." He had purchased his goods at the co-operative store as cheap as he could have procured them elsewhere; and he had spent no time in looking after his investment. Hence he could say, "Co-operation is literally a creation."

The experience of stockholders in the Blue and Kansas Valley Co-operative Association, is quite as striking. In 1877, a farmer's wife paid five dollars for one share. Since that time she has purchased her groceries at the grange store, allowing her dividends to accumulate, and she now owns stock to the amount of thirty-five dollars. Another woman owns four shares of five dollars each, which cost her absolutely nothing. The stock in both cases is drawing an annual interest of ten per cent, payable quarterly. The money can be withdrawn at any time, on giving the required notice.

The question at one arises, How can something as tangible as dollars come out of nothing? How can stock paying ten per cent be secured and held by one whose earnings must wholly go to procure the necessities of life? Let us try to explain. The distinctive principle of co-operation is this,—an equitable division of profits among those who produce the profits. The woman who could not raise five dollars to purchase a share in the grange store, bought her groceries there. In less than a year, her share of the profits amounted to the price of a share. As soon as she became a stockholder, she received ten per cent. interest on her stock, find her share of the profits was doubled. She has paid no higher price for her groceries than her neighbor who has patronized other establishments; she has paid nothing for her stock; and yet she has \$20.00 to her credit.

In every thriving business, profits arise as naturally as crops grow out of the earth. As the harvest shows an increase, sometimes "thirty, sixty, or even a hundred fold," so, is it with profits, in many kinds of business.

A portion of the capital of every civilized community must be employed in effecting the exchanges of commodities used by the people. This capital generally increases more rapidly than that employed in other ways, because it is often "turned over." A thousand dollars invested in a crop of wheat, cannot be "turned" in much less than a year; while an equal sum invested in staple groceries may be turned over a half dozen times in the course of a year, each time increasing in size. Usually, these greater profits redound to the advantage of the few: by co-operation, they are distributed among all who have contributed to produce them. In one case, the capital and the management of the business combined in one person: in the other those furnishing the capital employ an agent to conduct the business. Under the management of a competent agent, the quarterly dividends regularly come to the shareholders, without "work or effort or sacrifice on their part," and hence co-operation is for them a creation.

A Radical View of the Transportation Question.

The demand for lower freight and passenger rates that is beginning to assume the dignity of a "tidal wave" in many of the states, appears

to have struck Kansas with such force as to threaten to reduce to wreckage whatever shall come between the people and what they conceive to be their rights. That the people of Kansas are suffering more from railroad extortion than others is a fact that no one will seriously deny and that they with characteristic energy should repel wholesale invasions of inalienable rights is to be expected, and if all accounts are correct, the characteristic energy of Kansas will, ere long, be again manifested by the elaborate preparations that are just now being perfected for carrying their demands before the law-making power. So comprehensive are their plans and so determined will they be executed, the presumption is, that if they do not receive reasonable concessions the political coast will be strewn far and wide with hulks of stranded aspirants.

While we respect the new order—the Farmers' Alliance, that is just now attracting so much attention, because we believe it founded on correct principles. The question arises, are not the farmers who are formulating and declaring their wishes through the Alliance, which occupies an advanced position in the present agitation and where, it is destined to sweep the country like a cyclone, are they not losing sight of important facts, accepting a truce instead of demanding a final settlement?

If you can allow me sufficient space in the *FARMER*, I will offer a few suggestions. The demand appears to be for the appointment of railroad commissioners clothed with supervisory authority over the several roads of the state.

It is claimed that a similar arrangement has saved millions of dollars to the people of Illinois and still left the railroads prosperous. That both propositions are correct, we have no doubt, especially the latter, since the last report of the Commission puts the net income of Illinois railroads the past year at 35 to 65 per cent. on all stock, real and imaginary. Whatever may have been the benefits of that system in the past, it is painfully evident that now anything like equality between railroading and other industries has been entirely lost sight of and when it is known that a division superintendent, Mr. Munson, is having his claims seriously urged and with fair prospects of success for a place on that commission; the whole thing assumes the appearance of a miserable farce. Suppose we substitute for this arrangement, a reduction of the whole railroad system of the United States, practically to the same condition as navigable rivers, except that the general government shall own and control interstate or trunk lines, and the several states, the local lines or feeders.

It appears that the West Point incubus is a fixture in our institutions and it follows that the army officers and brevets educated at government expense, and turned loose annually to wait for a disturbance somewhere to demand their services, ought to be made useful in the interim, and unless that institution is a complete fraud, its graduates are surely competent railroad managers, and as such could render the country important service, and with little or no additional outlay for salaries, an item which considered apart would justify a material reduction of charges for services rendered to the roads.

Since it is evident that the state and general government must interfere in railroad management why not go the whole length at once and have the question permanently settled. Since railroad managers avow disinterestedness in the public welfare in the matter of establishing rates, common decency suggests that they would not insist on retaining a gratuity from that same public, provided they were granted a just equivalent for their actual outlay, and when it is remembered that nearly all the railroads in the United States have been built on the subsidy plan the purchase of the roads become a very simple affair. The roads thus owned and open to every one on just and equal terms, would, in our opinion, create a stronger bond of union between north, south, east and west than any one measure that can possibly be adopted, and by opening up and making communication easy between producer and consumer, manufacturer and consumer, more would be accomplished in the way of establishing the country on a basis in accord with our peculiar form of government, than by any other means.

If railroad managers are permitted to pursue the pigheaded course that has characterized their management in the past, the time is in the near future when the public demand will compel no less radical measures than these, and will it not be for the interest of the farmers and all others to wait.

MARTIN KAPT.

LOST.

\$5 00 REWARD.

A small sorrel MARE COLT: will be two years old next spring; no marks or brands. I will pay the above reward for information leading to the discovery of the colt.

Rev. FRANK WALKER, Auburn, Shawnee Co., Kas.

THE STRAY LIST.

HOW TO POST A STRAY.

BY AN ACT of the Legislature, approved Feb. 27, 1890, section 1, when the appraised value of a stray or strays exceeds

ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisement, to forward by mail, notice containing a complete description of the animal on which the owner has failed to appear, to the Kansas Farmer, together with the sum of fifty cents for the publication of 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 owner.

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 householder may take up the same.

Any person taking up a stray, must immediately advertise the same by posting three written notices in as many places as 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 be before any Justice of the Peace of the township, and file an affidavit stating that such stray was taken up on his premises, that he did not drive nor cause it to be driven, and that he has advertised it for ten days, that the marks and brands have not been altered, and he shall give a full description of the same and its cash value.

The Justice of the Peace shall within twenty days from the time such stray is 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.

He shall also give a bond for more than ten dollars, to be forfeited if 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 the Justice before whom proof will be offered. The stray shall be delivered to the owner, on the order of the Justice, and upon the payment of the charges and costs.

If the owner of a stray fails to prove ownership within twelve months after the time of taking, a complete title shall vest in the taker-up.

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

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

In all cases where the title vests in the taker-up, he shall pay to the County Treasurer, deducting all costs of taking up, postage and care of the animal, one-half of the net value of such stray.

Any person who shall sell or dispose of a stray, or take the same to any place where the title shall have vested in the taker-up, shall be guilty of a misdemeanor and shall forfeit double the value of such stray and be subject to a fine of twenty dollars.

Strays for the week ending February 9.

Chautauque County.—C. M. Knapp, clerk.

AND CALF.—Taken up by J. W. Jewett, Little Canada, Jan. 1, 1901. One year old, white cow, 3 years old, point of right horn broken or sawed off, branded daisy on each hip, the brand is indistinguishable, had with her a dun colored calf, valued at \$15.

Jackson County.—J. G. Porterfield, clerk.

COW.—Taken up by J. G. Porterfield, Dec. 20, one red cow with white spots around the eyes, branded with the letters W O on the left hip, 13 years old, and valued at \$15.

HEIFER.—Taken up Dec. 18, 1899, by John Thornbrough of Nebraska to one pale red yearling heifer, large white spot in face, and both flanks, some white on tail, one year old, valued at \$15.

MARE.—Taken up Dec. 18, 1899, by John Francis of Washington to one brown and white cow, 14 years old, white on right foot, two years old, valued at \$15.

STEER.—Taken up Dec. 27, by Geo. Coleman of Cedar to one red and white spotted yearling steer, brand of a cross on left hip, valued at \$15.

HEIFER.—Taken up by J. F. Pomeroy of Grant to one yearling red and white spotted heifer, mostly white, a notch out of under side of left ear, valued at \$15.

STEER.—Taken up January 10, by P. Bryant of Grant to one yearling red and white spotted steer, small and turn back, no marks or brands, valued at \$15.

Linn County.—J. H. Martin, clerk.

HEIFER.—Taken up by W. C. Derring, Liberty to Dec. 7, one white yearling heifer, point of left ear off, no other marks or brands visible, valued at \$15.

FLY.—Taken up by J. F. Phillips of Mound City to Dec. 5, one brown hind about 12 hands high, right hind foot white, small white spot in forehead and small white stripe on nose, valued at \$15.

STEER.—Taken up by J. W. Klecker, Sheridan to Dec. 24, one red and white spotted yearling steer, no marks or brands valued at \$15.

MARE.—Taken up by E. M. Blair, Scott to November 30, one two year old pony mare with a little white on the right hind foot and on the left, valued at \$15.

MARE.—Taken up by Benjamin McFarlane, of Scott to Nov. 29, one bay pony mare, with no brands except one near her hind foot or some other cause made, and valued at \$15.

FLLEY.—Taken up by Samuel Ashley, Potot to November 18, one light bay filly supposed to be three years old star in forehead.

COLT.—Taken up by Richard Rowe, Valley to Nov. 20, one red yearling steer, face, belly and feet white and tip of tail white, valued at \$15.

STEER.—Taken up by Robert Weyer, Marion to Nov. 10, one white yearling heifer, color of a roan color, mostly face and white belly, valued at \$15.

STEER.—Taken up by Gottlieb Grutze, January 1, 1891, one white steer one year old, valued at \$15.

Republic County.—Chauncey Perry, clerk.

PONY.—Taken up by Samuel Patton of Rose Creek to one light grey horse pony, hind foot white, and about 2 years old.

PONY.—Also by the same one light grey mare pony, bald face about two years old.

COLT.—Taken up by J. M. Day, Abion to Oct. 18, one large two year old sorrel horse colt, valued at \$15.

COLT.—Also by the same one black mare colt two years old, hind foot white, white face, wart near left eye, valued at \$15.

COLT.—Also by the same, one bay horse colt one year old, valued at \$15.

COLT.—Also by the same one black mare colt one year old, white in face and white feet, valued at \$15.

MULE.—Taken up by J. M. DeBride, Norway to November 20, 1890, one brown mare mule five years old, branded on left hip, has been reached and is about 13 hands high, is valued at \$15.

Biley County.—F. A. Schermerhorn, clerk.

COW.—Taken up by E. Meuninger, Sweet Creek to Jan. 1, one cow 6 years old with sucking calf, no marks or brands taken up Jan. 3.

MARE.—Taken up by L. M. Matthews in Maple Hill to Dec. 10, one sorrel mare, both fore feet and hind foot white, white stripe in face, saddle marks, about 14 hands high, supposed to be 12 years old, valued at \$15.

WILSON County.—J. C. Tuttle, clerk.

STEER.—Taken up by J. W. Moulton of Duck Creek to one steer, two years old, color red with some white spots on the flanks and a white star in the forehead; swallow fork in left ear, valued at \$15.

STEER.—Taken up by J. H. Mariner of Center to on the first day of January one yearling and white two year old steer, marked with swallow fork in left ear, and branded on left hip with the letter F, valued at \$15.

HEIFER.—Taken up by J. H. Mariner of Center on the 18th day of December one yearling heifer, color red roan with white on face, tail and belly, valued at \$15.

HEIFER.—Taken up by J. H. Morgan of Verdigris to on the 12th day of January one dark bay horse colt one year old last spring, with spot in the forehead, valued at \$15.

Woodson County.—H. S. Trueblood, clerk.

STEER.—Taken up by Robt. Daly, Toronto to Jan. 5, 1891, one small red steer one year old, crop or frost mark on left hip.

MARE.—Taken up by J. P. Felker, Liberty to January 7, one bay mare 8 years old 15 hands high, valued at \$15.

COLT.—Taken up by J. P. Felker, Liberty to January 7, one dark red four year steer branded 8 on each side and both hips, valued at \$15.

STEER.—Also by the same one red four year steer, some white spots, branded 8 on both sides and also on each hip, valued at \$15.

HEIFER.—Also by the same one dark red mottled face 2 year old heifer, valued at \$15.

COLT.—Also by the same one dark bay four year old horse

Elk County.—Geo. Thompson, clerk.

HEIFER.—Taken up by Orris Casson in Wild Cat to one red yearling one year old, white belly, valued at \$15.

PO NY.—Taken up on the 20th day of August 1899 by Cyrus Rogers in Wild Cat to one brown mare pony, brand on left shoulder and is about 6 or ten years old, valued at \$15.

Franklin County.—A. H. Sellers, clerk.

BULL.—Taken up by J. M. Davis Jan. 4, 1891 Lincoln to one bull, large frame, thin in waste, dark red with white on the belly and legs, about half of the tail white, white spot in face, horns so trimmed as to destroy wrinkles, one ear torn off bitten by a dog, age unknown but very old, and valued at \$15.

MARE.—Taken up by H. W. Stewart, Hays to Dec. 23, 1890, one sorrel mare, high mane and tail, 3 years old, about 15 hands high, curls on each hind leg, no marks or brands perceptible, valued at \$15.

Leavenworth County.—J. W. Niehaus, clerk.

HEIFER.—Taken up by M. A. Williamson Kickapoo to Dec. 20, 1890 one yearling one year old white heifer about 3 years old, white spot in forehead, white on belly, bush of tail white no marks, valued at \$15.

Lyon County.—W. F. Ewing, clerk.

COLT.—Taken up by H. J. Klier, Reading to, on the 6th day of January 1891 one bay horse colt, a small white spot in forehead, supposed to be two years old, medium size, no marks or brands visible, valued at \$15.

STEER.—Taken up by H. J. Stratton, Elmendorf to on the 8th day of January one red yearling steer, crop off the left ear, white face, valued at \$15.

CALF.—Taken up by H. J. Stratton, Elmendorf to on the 8th day of January one yearling calf, red and white spotted; no marks or brands, valued at \$15.

COLT.—Taken up by P. M. Finley, Fremont to, on the 3d day of January one two year old bay horse colt, white stripe in the face, some white on the right hind foot, no other marks or brands visible, valued at \$15.

COLT.—Taken up by W. G. Gibson, Fremont to on the 3d day of January one small bay pony horse colt 8 or 9 months old with small star in forehead and dark feet, valued at \$15.

Osage County.—Ed. Spaulding, clerk.

STEER.—Taken up by B. M. Peters Dec. 31, Burlingame to one red yearling steer, smooth crop off left ear, and valued at \$15.

STEER.—Taken up by D. W. Palmer, Fairfax to Dec. 24, one white two year old steer, branded N in a circle, small size, valued at \$15.

STEER.—Taken up by Thos. J. Griffiths, Aurora to Nov. 13, one white two year old steer, branded N in a circle, small size, unknown mark on left hip, valued at \$15.

STEER.—Taken up by J. E. Wate, Agency to, Dec. 28, one 2 year old red steer with white spots on the face, white stripe in the face, a few white spots on body, red tail, valued at \$15.

COW.—Taken up by C. T. Brall, Burlingame to January 9, one spotted cow 1 year old, some white on the face, and white line back white face, large horns, valued at \$15.

Shawnee County.—J. Lee Knight, clerk.

STEER.—Taken up January 5th by Chas. Stair of Soldier to one two year old, line back, white belly and red sides marked with white hairs, or a red roan, no brands seen, valued at \$15.

COW.—Taken up Dec. 23 by Robt. S. Gabby of Roseville to one pale red cow three years old, split in right ear and under bit out of left ear, some white about flank and belly, no brands visible, valued at \$15.

Wabash County.—T. N. Watts, clerk.

MARE.—Taken up by B. M. Shunard in Wilmington to Jan. 3, one iron grey mare two years old, no marks or brands, valued at \$15.

MARE.—Taken up by K. A. Kaufman, Alma to January 3d one sorrel mare four years old, white star in forehead, brand on left hip, valued at \$15.

MARE.—Taken up by Chas. Weaver, Alma to, January 6th one bright bay pony mare, one white hind foot, star in forehead, supposed to be 7 years old, valued at \$15.

COLT.—Also by the same at the same time one horse colt two years old, color bright bay, one hind foot white, valued at \$15.

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