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### THE KANSAS FARMER.

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

#### Weather Laws.-No. 1.

In the spring of 1855, then residing near Oregon, Holt county, Missouri, a large train came in from Salt Lake after supplies, and to take out a large number of English and Swedish proselytes, then newly landed. At the hotel a number of old traders and plainsmen gathered about the wagon-master, and all appeared anxious to learn whether the winter had been mild or severe in the mountains, and whether the snowfall had been heavy or light. They were told by the head teamster that the winter of 1854-5 had been mild in the mountains, and the snowfall light. This was looked upon as a bad omen. It was said that the river would be low, and but little boating up the Missouri the summer following; freights would be high, and markets inactive, with the freight paid by the "purchase people" both ways.

The winter of 1855-6 was one of universal severity in the mountains, on the plains, and indeed throughout most of the United States. Again, the head wagoner of the Salt Lake train "came in" in the spring of 1856, for another cargo of freight and proselytes, but this time a different tale was told of hardships, struggling through the snew, and of the suffering of men and animals from cold. The old plainsmen, trappers and traders of the Platte Purchase, now considered the omen good—the river would be high, freights low, business active, prices good, and "times beoming." I cannot say that anybody spoke of the influence of this accumulated condensation of water upon the weather of the plains, nor can I say that it was not discussed. Afterwards, however, when becoming more familiar with the history of those long, thread-like, branchless streams which discharge the melting mountain snows through a dry, sandy plain, where there is little rain. I was struck with the resemblance of the Platte, the Arkansas, the Niobrara, Milk river, etc., with the Nile, the Euphrates, the Amoor, the Indus, the Ural, the Rio Grande, etc. In all these the floods are proportioned to the volume of melting snows. [As to the Nile, we now know that the flood varies with the tropical rains about the lakes which form its sources.

On many of these streams the years when the snow water is light, the valleys suffer from drought, and when the snow-fall has been heavy they never suffer from drought. From this the dectrine was deduced that the amount of water borne inland to any particular district, would find an expression in the congealed water condensed upon the mountains which feed these streams, and this would again find expression in the floods which followed the period when an accumulation of this congealed water is liberated.

But the water flowing off of a mountain range into a plain of loose materials, occupies more ground than the visible channel. The water penetrates the soil in many places, and far down the plain breaks forth as springs. Much water is also brought up from considerable depths by capillary force and evaporated into the air.

During a portion of the year it would appear that the air yields moisture to the earth more than it takes up from the earth. During another portion of the year the conditions are reversed, and the earth yields more moisture to

the air than it then receives. Let us further illustrate: Suppose that on any particular day, say March 21st, the dew point-that is the temperature at which the air when cooled begins to deposit moisture, is at 63°; but on that day the temperature is 70°, then the air instead of wetting up the soil, will amount becomes an irregular constant, reaching be taking up moisture from the soil. The water taken up may become the cause of breaking up the equillibrium in the lower strata, and that air having a temperature of 70°, may acquire an ascending impetus, and rush up to where the temperature is below 30°, and thus locally pour down a torrent of water. Still since the temperature will soon return to 70°, that water will be again taken into the air, or what is worse, it will by the rivers escape to the sea. In either case it has added nothing to the general water supply of a large inland area, but if the rainfall has been violent so that a considerable amount of water is poured into the river, the water supply is in fact diminished by the escape to the sea of this water, concentrated at a small focus from a large loose area. But if we suppose the

to be gradually falling to a temperature below that, and that for four or five months it will remain below that temperature, then we know that a considerable amount of water will be deposited upon the plains, and left there so far as the air is concerned. It will escape in part to the sea, and will be largely used in soaking the ground, while a certain other portion will, on warm days, rise again into the air, and being wafted toward the mountains, will there be deposited as snow, or falling upon the soil of the plains, will be caught by frost and locked up until spring.

When this supply is large it tends, when added to the incoming vapors of the spring, to prolong the season of rainfall and humid air, and when light, or when owing to the extreme mildness of the winter, (especially when mild and dry), it is melted and evaporated early, to hasten that period when the drought is greatest.

Guided somewhat by these principles, which to me appear most obvious generalizations, I have for a number of years been quite successful in forming a fair conjecture of the coming season. Ordinarily there is no difficulty in it except where one is deceived by local phenomena, as the piling up of snow in some limited locality, while the largest areas are unusually

Last June I made a venture, to put to the test of trial a somewhat more advanced hypothesis, and undertook to say a year in advance as to what the general character of the year extending from August 1st, 1879, to August 1st, 1880,

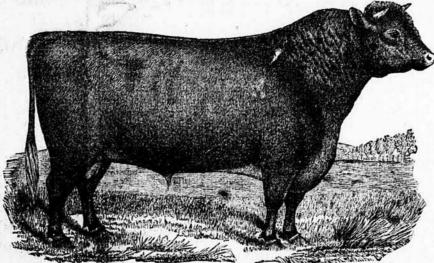
While I still believe that the new hypothesis is compatible with the old one in regard to the snow in the mountains, and would have, in fact, no other expectation to guide us in a doubtful case to a more unerring conclusion, yet I am bound to say that if it is true, there is a large fall of snow upon the eastern face of the Rocky Mountains, as some persistently claim, then I should adhere to the new hypothesis, and insist that the year 1880 will be a year of light rains for all that part of the plains lying between latitude 35° and 45°, snow or no snow.

As I shall not in the succeeding papers return to this subject, I will here remark that I feel very confident that from latitude 47° to 37°, the eastern face of the Rocky Mountains, and all the plains abutting upon these walls, are remarkably free from snows, while the west side of the "divide," and the western slope of the Sierra Nevada range, have unusual North of latitude 47° these same humid winds from the Pacific having whipped over the mountain range, which is there an elevation of six thousand fcet, has given abundant snow in northern Dakota and in Manitoba.

To illustrate the principles by which such conjectures have been made, with some degree of accuracy, and to assist somewhat at the placing of meteorology back upon its ancient basis, when there was more study of the weather and less of particular storms, a series of papers, essentially prepared in the summer of 1879, though mostly re-written, is presented to the

I trust the reader will have no trouble, in succeeding numbers, in understanding me when I speak of the annual period of influx and the annual period of efflux. By the first will be understood that portion of the year when the falling temperature of the plains causes the air to leave with us more water than it takes out by evaporation. By the period of efflux will be understood that portion of the year when the volume of water in the soil is largely passing to the air again and being borne out. Of course the water in streams which escape to the sea, is water of efflux, and since all the water not evaporated back into the air, finally flows out by the discharging river, by measuring the volume of water disgorged by a river in a year, we know how much water is received in excess of that retained in the air and soil. This its minimum limit in certain drouthy years, and its maximum in certain wet years. Subject, then, to this slight variation, the volume of water discharged by any river in a year, is equal to the amount added to its basin in that year. The amount of water discharged by the Missouri may be slightly less than that received upon its basin, but obviously it cannot discharge more water than it has received. Assuming that the discharges by which the influx water of one river basin is borne to another, average up about even, the proposition will still stand that the amount of water discharged from a river basin is the equivalent of the whole additional

The character and number of streams appearing upon a map of any region, very fully trailing plant, with narrow, thickish, smooth



DUKE OF NEWHAM, OWNED BY J. C. STONE, JR., LEAVENWORTH, KANSAS.

ever, should be known to be dry. Counties in Kansas traversed by the Arkansas, or Kansas, but receiving no creeks or brooks, we absolutely know are dry counties, liable to frequent and extreme droughts. By tracing across the 'plains," upon a good map, the area without streams, great or small, the area of the least rainfall is easily outlined. In occasional years the region without streams may receive a little rain-enough perhaps to raise crops of small grain, and this being evaporated as often as it falls, (and that presently after falling), it is not gathered into either salt lakes or streams, but collects upon flats, where evaporating it leaves the minerals held in solution to constitute a "salt plain," or "alkali flat." All such areas are without trees, and they are all toward the heart of the continent or under the lea of a range of mountains reaching quite to or near

the snow line. We can write the whole history of the people on these lands which lie between forests and deserts-the great grass lands of the world. If the people have adopted irrigation-wealth, dense population and the highest types of civilization and powerful empire: witness Egypt, Assyria, Persia, India, all Asia Minor, and the ancient Peruvian and Aztec races. If the people do not or cannot irrigate, then a people cupy that re ocks and herds as surely as a people of culture are developed in the other. At one extreme of this civilization stands the "Cossacks of the Don," and of all the steppe country, the "gaucheros" of the pampas, the "bushranger" of Australia, the 'Texas ranger" of the Rio Grande, and at the other the "Bushmen" of South Africa, the "Bedouins" of Sahara, and the "Turkomans" of Central Asia.

A country with numerous streams and many overflowing lakes, is a humid country, and if below the polar circles is clothed with forests, and its people largely engaged in the lumber interests and ship-building, in temperate climates, and in sugar cane and the like in tropical climates.

The floods of the streams become an index of almost the whole weather problem, the time of flood denoting the period of the year when the greatest efflux begins, and the ebb the period when evaporation is taking up more waters than is being received, and in winter that the water supply is locked up in frost. By observing carefully the floods of the rivers we may observe the progressive march of the water of influx, that is we may determine the order of succession. To illustrate: The rivers of the south Atlantic and Gulf states, and also the Ohio, Tennessee and Cumberland, have this spring been at flood. What area is visited by drought the year these floods occur?

C. W. Johnson.

Hiawatha, Brown Co., Kansas.

#### Cabbage.

The cabbage tribe embraces several distinct as well as widely different plants, of which the following are all of importance in cultivation: cabbage, kale, cauliflower, brecoli, kohlrabi, rape, turnip, and rutabaga. These, though differing so widely in form and manner of growth, are considered by botanists as having sprung from the same origin.

The cabbage is a biennial plant; its first year is spent in laying up a store of nutriment to be expended the second year in sending up seed stalks and the production of seed. It is a native of the west and north of Europe, its native habitat being the low, damp districts near the coast. In its wild state it is a slender, almost air to be saturated at 63° and the temperature represent the climate of the country. Counties leaves, with no appearance of a head such as food.

in Kansas not traversed by any stream what- we use in the cultivated varieties. The many forms under which we find this plant in cultivation, are the result of cultivation, and clearly show the power of climate, soil and culture to modify the habits and change the characteristics of plants. The cabbage has been long in cultivation, its introduction being hid in the distant past; it is, however, mentioned in some of its forms as already in cultivation by ancient Greek writers, and Roman authors speak of many varieties cultivated in that country. The ancient Celts also cultivated the cabbage many centuries ago. It has been grown in Holland for centuries, and is supposed to have been introduced into England about 1561.

As might be inferred from its native habitat in low, moist situations, this plant succeeds best in a moist soil and situation.

The cabbage as a fodder and food plant is justly growing in popularity. The amount of nutriment that may be raised from a given surface of land, is quite remarkable. If planted 3x3 feet, it will give about 4,800 plants to the acre. It has been known to produce as much as forty-five tons to the acre, though half this amount may be considered a very fair crop.

An analysis of the cabbage shows it to be composed of the following constituents: Cabbage head-water, 89; organic matter, 9.8; ashes, 1.2. Cabbage stalks-water, 82; oranic matter, 16.1; ashes, 1.9.

It is thus seen that this analysis agrees with the prevalent opinion that cabbage is a very succulent or watery plant; nearly nine-tenths of the head and more than four-fifths of the stems being composed of water.

The organic matter which, of course, contains the principal parts of the nutrient elements of the cabbage plant, is composed of the following constituents: Head-albuminoids, 1.5; carbohydrates, 6.3; crude fiber, 2; fat, etc., .4. Stem-albuminoids, 1.1; carbo-hydrates, 12.2; crude fiber, 2.8; fat, etc., .8.

This represents the proportion of these subtances that are found in the plant in its natural or gross state. In order to determine the amount of these nutritious elements contained in each of these parts of the cabbage plant, exclusive of the water, those given for the head may be multiplied by ten, and those of the stem

A ton of cabbage in the green and dry states, will give of actual nutriment, leaving out the crude fiber as unassimilable, about the following quantities: Heads—green, 164 pounds; dry, 1,640 pounds. Stems—green, 241 pounds;

dry, 1,446 pounds.

Now if we allow 4,000 plants to the acre to make a fair growth and produce heads that will average ten pounds each, it will give us a product of twenty tons per acre, or, in the aggregate, about 3,300 pounds of actual nutriment to the acre. When it is remembered that twice that amount is often realized, it will appear that where this crop is or may be made reasonably successful, it is a profitable crop to raise. This will appear more distinctly if we compare this will appear more distinctly if we compare this with a crop of corn and one of wheat. Allowing corn to produce thirty-five bushels to the acre, and wheat twenty, the amount of actual nutrient elements obtained from an acre, as compared with cabbage, will stand about as follows: Cabbage, 3,300 pounds; corn, 1,660 pounds; wheat, 985 pounds. Excess of cabbage over both wheat and corn, 655 pounds. It thus acrosars that according to my figurative across that according to my figurative.

It thus appears that, according to my figur-ing, one acre of cabbage is theoretically worth one-fourth more than an acre each of wheat and corn. But it is a question whether, cost and risk considered, it will do to depend on any such advantage in favor of the cabbage crop over that of the cereal grains mentioned. I think there can be no doubt but that where the conditions are favorable to its growth, it would be profitable to raise a few acres of cabbage for milch cows and other stock when the pastures fail in the fall; and if enough could be kept to give a feed two or three times a week during the winter to cows, poultry, etc., it would prove a most excellent addition to their ordinary dry food.

L. J. TEMPLIN.

given acre grows smaller every year, and it is simply a question of time under the present the winter to cows, poultry, etc., it would prove a most excellent addition to their ordinary dry food.

L. J. TEMPLIN.

#### Wonderful Kansas.

From the inception of her history, Kansas has been in all respects a constantly recurring series of surprises.

On the old maps it was called a desert, and now it has at one leap become one of the world's granaries. Its railroads were built through what were described as howling wildernesses, and their stock today is par or nearly so. Its new towns tax the postoffice department to keep up with them, as they sprout up like spring

We thought ourselves prepared for anything from that quarter, but we confess to a surprise in finding the agricultural and live stock interests competing with those of Iowa, Missouri, Illinois, Ohio and Kentucky. One day's examination of the herds of Mr. J. C. Stone, Jr., convinced us that an earnest competition in the best style of stock is at hand. This farm (Fairholme) is three miles

from Leavenworth, and his herd such as would be a subject of pride in the older states. His bull, Duke of Newham, whose portrait is given in this number, we think more nearly an exact reproduction of his sire, 14th Duke of Thorndale, than any of the get of that famous bull we have lately seen. Six more of his yearling bulls are by the scarcely less famous 4th Duke of Hillhurst, besides Louans, Young Marys, and other excellent families.

At the head of this herd stands Kirklevington Lad 3d 32982, whose three tops since the imported cow Kirklevingten 11th are 10th Earl of Oxford, 3d Duke of Oneida, and 14th Duke of Thorndale. Here are found also five fine Bates cows, Kirklevingtons, Crags and Hilpas. The other females, about 65 in number, are Louans, Young Marys, Cambrics, Belindas, and other equally good families, among them many excellent show cows. We also found here a fine lot of steers and spayed heifers of his own raising, some of which would have troubled the prize winners at the fat stock show, if they had been present. His sheep, numbering between three and four hundred, are Cotswolds and Southdowns, and each a credit to the breed.

If any of our readers are curious to see what is being done in the higher lines of stock breeding in Kansas by a young man of twenty-three years of age, let them visit Mr. Stone. He is justly proud of his achievements, and always takes pleasure in showing what has been accomplished in this state, and what its capacities are. - Western Agriculturist.

#### Capital and Labor on the Big Farms of Dakota.

We spent an evening in the comfortable home of one of the superintendents, and heard him explain the system of book-keeping. Every man is engaged by contract, for a certain time, to do certain work, for certain wages. He receives his money on presenting to the cashier a time check certifying the amount and nature of his labor. The average price paid to hands is \$18 a month and board. In harvest they get \$2.25 a day. A record is kept by the foreman of the amount of wheat turned out by each thresher, by the driver of each wagon of the amount of wheat loaded by him, and by the receiver at the elevator of the amount of wheat brought in by each team. All the farm machinery and the provisions are bought at first hands for wholesale prices. Mules and horses are bought at St. Louis. Wheat is not stacked or stored, but shipped to market as rapidly as possible. Everything is regulated by an exact system, and this is what makes the farms a

Brains and energy in the man who controls them and in those whom he choses as his sub-ordinate officers—this is the secret of the enormous profit which have been made on the Dal-rymple farms. The cost of raising the first crop is about \$11 an acre; each subsequent crop costs \$8. The average yield for this year was about nineteen bushels to the acre. This was about intereen bushels to the acre. This could be sold at Fargo, on October 1st, for 80 cents per bushel. A brief calculation will give you \$4.20 per acre profit on the new land, and \$7.20 for all the rest; or, say, \$130,000 gain on one crop. These figures I believe to be too small, rather than too large.

But does this large farming pay for the country? It absorbs great tracts of land and keeps out smaller farmers. It employs tramps, who vanish when the harvest is over, instead of increasing the permanent population. It exhausts the land. The cultivation is very shallow. There is no rotation of crops. Everything is taken from the ground; nothing is returned to it. Even the straw is burned. The result of this is that the average crop from any given acre grows smaller every year, and it is

#### Karm Stock.

#### The Best Sheep for Southwest Kansas.

The Sedgwick County Farmers' Club had recently a discussion as to the best breed of sheep for that country, which was briefly reported in the Republican. W. H. Ransom opened the discussion and favored a cross between the Merino and Cotswold breeds. For seven years or more of its life a sheep will yield a fleece equal in value to the carcass from which it is taken, and in the meanwhile the increase in number will pay for the keeping. The difference between the price of wool at the place where it is shorn and where it is marketed is less than any article produced on the farm. If the price does not meet the grower's views when it is taken off then ascertain what kind of wool is going to be planting is preferable. I did mine by plowing the first), and Mr. Gifford, two miles further it may be stored a year for one per cent. of its in demand, and if the market is demanding a out, having pickers follow right after the plow, value, and it is pretty sure to gain that much in weight. In all old countries where agriculture has made the greatest advance sheep-raising has constantly grown in importance. During the last 100 years the number of sheep in Great Britain has doubled, the price of wool has mutton. doubled, while the price of mutton has more than quadrupled. No branch of farming in England to-day is in a more prosperous condition than the production of wool and mutton. The demand for mutton always increases as the community increases in age and wealth. The He never says anything about wool. If he gets butchers of Wichita will tell you that the demand for mutton as compared with beef increases every year. Again, sheep are the best adapted to furnishing meat for the farmer's family of anything he raises. The carcass being small it can be eaten fresh. Mutton can be kept longer than beef under the same circumstances, and its flavor is improved by its being kept a reasonable length of time. The health and the bill of fare of the farmer would both be better if fresh mutton oftener took the place of salt pork. Sheep-raising like any other business, proving, nor let them fall off in flesh, which is has had its ups and downs, but it is now pretty generally admitted that no kind of business has paid so well for a series of years. It is an interest too much neglected in the west. This animal that furnishes clothing, food and light, which eats what other animals reject, which will climb hills too steep for other animals to ascend, which will make quite a portion of its cross-bred wool from the Merino and Cotswold, living off of obnoxious weeds, is entitled to vastly more credit than it receives.

Many of our farmers indulge in a growl be cause their corn only sells for eighteen cents per bushel, when, if fed to sheep, it would bring them from 50 cents to \$1.00. For every bushel of corn I have fed my sheep since last shearing I expect soon to shear one dollar's worth of times seems as though agriculture of all subwool, while the increase in lambs will more

In conclusion, fellow-farmers, my opinion as to raise may be given in a nutshell. It is the cal, and bearing a heavy fleece of first-class wool, and my experience tells me that that sheep is a grade or a cross-breed between a Cots-

Mr. Fox followed with a strong plea for the Merino. He claimed they were hardier, produced more wool, and consumed less feed; admitted that they matured less early and were smaller when matured, but claimed they were less liable to foot-rot and scab, and were better protected from the storms of winter and hot suns of summer by their close fleece. In short, he recommended the pure Merino to the farmers as the most desirable sheep for them to raise. When asked why he recommended a cross between the Cotswold and the Merino as the best sheep for wool and mutton in his late report to the department of agriculture, he answered that that was just his opinion, but he did not consider a mutton sheep in demand for the farmers here, or mutton producing of any great importance to them.

Mr. Foutt's experience had been principally with the Merino, and he found them very profitable. He believed the flock he had charge of now would yield fully one dollar's worth of wool for every bushel of corn they had consumed. The flock of Mr. Uhl, 450 in number, sheared last year 171 pounds per fleece. When asked if Mr. Uhl's flock were all pure Merinos, he answered no, and added that he could not say that there were any pure breeds among

Mr. Pierpont thought that self-interest some times moulded the sentiments of men when they were talking upon matters of this kind. He had been a butcher, and was of the opinion that Merinos were not the equal of the larger breeds for mutton; that the European demand for dressed meats did not generally include them. He had seen but a few flocks with the foot-rot and they were Merinos. He believed that the production of mutton must be one of the sources of profit to the sheep-raiser of Sedg-

Mr. Eicholtz considered the Southdown the best mutton sheep, and also very fair for wool, and he favored it as the Sedgwick county sheep.

Mr. Carothers had had experience with sheep back in Ohio. Merinos were the popular sheep there, and they had now taken the place of the common breeds altogether. The average fleece with them had increased from three to nine pounds.

Then, at the request of the Club, Mr. David Hayes submitted for their consideration a propesition for the organization of a joint stock company which should be designed to place sheep-raising where it should be second to no other interest in Sedgwick county.

#### Mutton and Wool.

For the production of wool and mutton there is no more profitable sheep that can be raised

than the Merino and Cotswold crossed. The lambs are of good size, and if sold to the worth more for wool and mutton as sheep. The wethers at three years old will make good mutton, and in the markets of large towns and cities are always in demand. The ewe lambs should be raised, in order to take the place of older ewes, which ought to be taken out of the flock at five years of age. Ewes for mutton and long wool should never be allowed to have more than three lambs.

know whether to use Merino or Cotswold rams with ewes of one cross. No farmer who desires a mutton sheep should breed much finer than a half-bred Merino. If, after crossing the half-breed with another full-blood Cotswold, coarser wool, use the Cotswold again; but if finer wool is likely to be in demand, pause a little before using a full-blood Merino in this little earth, which will keep them perfectly, as case, for though you will obtain a fine fleece, you will have less careass and not as good

Mr. Harris, of Moreton Farm, says he can always tell an American and an Englishman when they go to examine his flock; the Englishman looks at the form of the animal and begins to talk about the weight of the sheep. form and weight of carcass, he knows the wool will be all right. The American examines first for wool; he looks at the length of staple and fineness of fiber, and lastly weight of careass.

In the eastern states, and also in Ohio and Michigan, long-wooled sheep will give better returns than the fine-wooled Merino, and will require a different kind of treatment. Nothing will produce better wool than a liberal supply of roots, to which may be added some corn, but we should never fail to keep the animals ima great injury to the wool.

For the far west and mountainous regions, the Merino is better adapted than the heavier sheep, but there will have to be a great change in the manufacture of wool before the finest wool, only adapted to the production of fine cloths, will be worth as much per pound as a leaving entirely out of the question the extra value of the carcass for mutton. And as there is a field wide enough for both enterprises, there is no need for controversy in the matter. In fact it only makes parties appear foolish to be continually looking for some place or matter upon which to make a dispute, and it somejects was the most fruitful in controversy. A than pay for all other feed they have consumed. great many who attend agricultural meetings, seem to have but one object, namely, the disto the kind of sheep for you and your neighbors puting of every question raised. The United States are large enough to embrace every sheep that is vigorous, strong, growthy, symetri- branch of agriculture, and if persons were as anxious to cultivate that branch best adapted to locality and climate as they are to criticise the doings of others, we should have less grumbling about the unprofitableness of farming.

There has been the past year a somewhat strange anomaly in the mutton and wool busi-While there have been exported large quantities of mutton to England, some of the largest manufacturing corporations have been buying combing wool abroad. Large quantities of both English and Irish grown wools have found a market on this side the Atlantic. The carcass of the Merino sheep is not wanted in England—the mutton has too rank a taste for that region-but the nutton from a cross of the Merino and Cotswold would not be objectionable, and might be made a source of large profit to the farmer; for there is a great demand for wool in this market.

Sheep will eat the corn, and it is greater economy to send this grain to England, made into mutton, than to export the corn as harvested. It costs much less to bring a dollar's worth of wool to the place of consumption than a dollar's worth of corn to the seaboard. Six cents would pay the freight of the wool, while it would require more to pay the freight upon the corn than it is worth at some of the further points of production. Besides which, exporting corn draws away the fertility from the soil, but feeding the corn to the sheep increases the fertility of the land. So that in place of wornout land we have a rich soil, besides keeping at home the money which would have to be paid to foreign countries for wool. We receive money in return for the mutton exported, and obtain better prices for the corn by transporting it in the form of mutton. This question of transportation is an important one, and ought to necessarily enters into all sound calculations .-Cultivator.

#### Raising Artichokes.

A good deal of interest has recently sprung up among the readers of the KANSAS FARMER, in the cultivation of this root, and those who have tried it recommend the artichoke highly as a root crop for all kinds of stock; and for milk cows they are particularly good, on account of their not imparting a disagreeable odor to the milk as turnips are apt to do. Mr. E. A. Reihl, of Alton, Ill., who has raised artichokes for stock, adds his testimony to their value, and gives the following, in Coleman's Rural, as his manner of cultivation, which has the important advantage of being simple and economical:

"Any soil that will grow any other crop will grow them, in fact some of mine are on such an occasion. land where I never could get anything else to grow, though on rich land the yield will of two years' growth, names and weights as folcourse be greater. Prepare the land as for corn

will grow so fast as to shade out all weeds. tops and cure them without detriment to the The great puzzle with many farmers is to roots, as their stock was fond of the tops, but as the roots are not formed until late in the fall, advisable to cut the tops. Planting can be rams. done as late as the middle of May, but earlier then harrow and plow again. They can be dug in the fall and kept in piles and covered with a freezing does not hurt them. Whoever has hogs, cattle, sheep, horses or mules, should grow them; all stock are foud of them; they contain much nutriment and promote good health in all animals to whom they are fed."

Another correspondent in the same paper adds his testimony to the above. He says:

"I 1878 I planted about half an acre on old, nanured land. The yield was very large From what we dug for seed-fifteen or twenty bushels-I estimate the yield at not less than six hundred bushels per acre. I was so well pleased with them that last year I planted eight acres on the same kind of land, but owing to careless planting and very dry weather, had a very bad stand-not over one-half. I cultivated like corn with Thomas smoothing-harrow and plows. About the middle of November I turned in one two-year-old colt, twelve head of cattle, five old ewes for mutton and ninety hogs. In February I took off forty hogs and eight head of cattle, and believe there is enough left to keep the remaining fifty hogs until April 1st. At that time I will plow the ground, and if there seems to be enough left to seed the land, will let them alone until the plants are up and then give them one or two good harrowings. If too thick, will run the plow through them to thin them, and expect to have the cheapest lot of feed ever produced here.

"I will venture to say to all who are 'almost persuaded' to plant, to plant plenty of them. Why? Because the same land will produce double the amount of feed that it would in corn. You do not have to harvest them. The hogs will throw them out twice as fast as they can eat them. The cows, calves, sheep and horses, if allowed, will gather them. They will not be wasted; and if you want to see your milk cow smile and yield a full pail of milk, or want to hear your horse laugh, give a bucket-ful of artichokes."

#### Sheep Shearing and Other Notes.

Last week I thought I would go out and see what other people were doing and how they felt, and see what the country looked like. As I went north from Larned, I saw several very good looking crops of wheat, and people plow ing, sowing, and preparing to plant. It looks strange to those who are not acquainted with such soils, to see how mellow and moist the ground is after a continuous drouth of over eight months. I saw some very fine wheat on the dry Walnut, at Mr. Greer's, and several other places, and some fields entirely dead. Mr. Greer's sheep are looking well considering the fact that the lambs were dropped in February. The cold March winds froze the wheat, which was the main dependence, and chilled the lambs to such an extent that a gaeat many perished. The clip will be lighter on account of the early shearing. I do not like the plan.

From there I went to Mr. C. J. Fry's, and found him cheerful and smiling as usual. His sheep are looking well and are gaining finely on the young grass and will turn off a good clip. Mr. Fry has fed no grain and cannot expect his sheep to do him justice.

From there, with Mr. Frye, we went to Ellis. Ellis has improved greatly in the last six years, and is a tidy little town with a good many nice stone buildings, and the people are as energetic, persevering and hopeful as any in

From Ellis we went to Mr. A. S. Eten's, five miles east, to be present at the shearing festival, which was the most enjoyable and sociable gathering that it has been my lot to attend in a long time. There] were about sixty present, and all seemed to enjoy the occasion to the utengage the serious attention of the farmer, as it most. Everything was conducted in such a free and easy, sociable and liberal way that every one seemed perfectly at ease and quite at home. Mr. Eten and his family appear to have the knack, naturally, of making their guests feel at home. They are blessed with a good many neighbors who seem to have the amiable qualities which make the neighborhood very agreeable.

The shearing commenced about 11 o'clock, with a six-year-old ram, General Grant, owned by Mr. Charles Smith; carcass, 157 pounds; wool 34 inches long, 101 months' growth, and sheared 23 pounds; and Mr. A. S. Eten's twoyear-old ram, Kansas Chief, carcass 143 pounds, fleece 31 inches, one year's growth, sheared 24 pounds; was raised by Samuel Jewett, Independence, Missouri. The company adjourned to the house for dinner. I will only say the dinner was a success on the part of the ladies, and could scarcely be equaled on

In the afternoon seven rams were shorn, all lows: Challenge, gross 147 pounds, raised by or potatoes, and draw furrows four to five feet Pain, Bridgeport, N. Y., length of staple 4

apart. Cut the artichokes into pieces about an inchos, fleece 271 pounds; Constitution, raised For instance, if you use a frame the size of the inch square, drop these into the furrows sixteen by Jewett, gross 132 pounds, length of staple butcher will bring a fair price; but they are to twenty inches apart, cover with a plow, and 3½ inches, fleece 25½ pounds; Matchless, raised leave the ground rough. Just as or before the by Pain, N. Y., gross 138 pounds, length of artichokes come up, go over the whole cross-staple 47 inches, weight of fleece 254 pounds; ways with a harrow, and continue harrowing Golden Fleece, by Jewett, gross 146 pounds, once a week until they get too large, then use length of staple 31 inches, weight of fleece  $26\frac{3}{4}$ cultivator and plow. If the harrow is used in pounds; Little Greezer, by Jewett, gross 139 time, it will destroy all weeds, and when they pounds, length of staple 334 inches, weight of fleece 25 pounds; Silver Horn, by Jewett, gross Some have asked me whether they could cut the 143 pounds, length of staple 4 inches, fleece 25 pounds. All these young rams belong to Mr. Eten and are in fine condition, as well as his brood ewes and young sheep, and will turn off and they continue to grow long after frost has a fine clip. Most of his young sheep are bred killed the foliage, I do not think it would be from Colorado ewes by the best of Merino

> We visited the other Mr. Eten, (brother of east. They have all fed light, but are practical sheep men and understand their business. Their soil is good for sheep; grass and water also good.

> After a very pleasant and satisfactory visit, such as you can always have among sheep men, we "lit out" with the wind in our backs. We saw very little wheat on the way that would make anything of a crop, and I came back as well pleased with Pawnee county as anything I W. J. COLVIN.

#### Poultry,

#### Selection and Management of Poultry.

In response to the kind offer of Mr. F. E Marsh, I will give your readers some ideas or the subject of poultry gathered from an experience in the business. In this, as in other matters, success is only reached by earnest effort in the right direction. We have derived considerable information from reliable works on the subject of breeding, managing, marketing, etc; but we consider the knowledge gained by experience of more value than mere theory. The selection of fowls is of first importance and should be made with care. The healthiest and best fowls should be selected. Those under three years old are to be preferred. Old fowls are known by the hardness of the spur and the roughness of the scales on the legs.

If eggs are the only object, perhaps the Spanish or Leghorns, are to be preferred, but if the profit is to be derived from marketing also, the Brahmas should be selected as the best for general purposes. Next, we would mention the necessity of a healthy location and comfortable, well ventilated quarters of sufficient room for the number of fowls to be kept. Feed and water troughs of liberal capacity should be provided. Oats and corn ground together with the addition, occasionally, of cayenne pepper and salt in small quantities is the best food for fowls in winter, though a change is often found nec-

For setting purposes, a hen of quiet disposiion is best. The nest should be secluded as much as possible and should be made of chopped hay or straw, and partly filled with dry earth or powdered charcoal to preserve the temperature of the eggs in the absence of the hen. Select eggs that are smooth and of a uniform size. Very large or small eggs are objectionable. When the young chicks emerge from the shell, they should be allowed to remain in the nest till they are large enoug a run about, when they should be removed to a coop, and fed a mixture of grated bread and hard boiled chopped meat as a substitute for worms and ina little at a time. The feed should be thrown gravel with it, to assist their digestion.

In Kansas, fowls are generally healthy, if properly managed. Cholera is the worst disease we have to contend with, and this is generally the result of ill-ventilated quarters and the lack of proper food. Prevention is better than cure, but if prevention has been neglected a cure may be usually effected by a change of location and diet, and the following mixture in one quart of corn meal and dampened for use: Alum, resin, copperas, lac-sulphur and cayenne pepper, each one-half ounce. As a preventative this should be given once a week. As a cure it should be given daily. This quantity is sufficient for fifteen or twenty fowls.

Plenty of lime and gravel scattered about the poultry yard will help to keep the fowls in a healthy condition. The perches should be sprinkled occasionally with sulphur, or carbolic acid diluted, to destroy the vermin. The poultry house should be supplied with proper ventilation, and fumigated twice a year, by closing up and burning sulphur inside, taking care to have the house well aired before allow ing the fowls to enter.

We find that it pays to keep the very best and purest breeds of fowls and to take good care of them. To hope to be successful with poultry without making an effort to learn the habits and wants of fowls, and giving them a share of your attention and the care necessary to suecess in any other business, is to hope against our experience.

MRS. MARY THOMPSON. Omio, Kansas.

#### Apiary.

#### Fastening Comb Foundations.

FASTENING COMB FOUNDATION IN BROOM FRAMES-THE METHOD WE PREFER.

In the first place have the sheets cut the proper size for the frames used in the apiary. ly it may be, is duly nominated.

American, viz.: 12x12 inches in the clear, the sheets of foundation should be cut so as to leave a space of about one-fourth inch on each side of the frame, and about one-half inch space between the lower edge of the foundation and the bottom bar, having it attached to the frame only at the top. Next cut out little strips, the length of the upper edge of the foundation, 1x1 inch square, using one for each frame of foundation. Now cut out a board three-eighths inch thick and just large enough to slip inside the brood frame. Now with a convenient sized table and a lot of three oz. tacks we are ready for business, except the strip which must be firmly screwed to the table near the edge next to the operator. This strip should be about the length of the top bar and about one inch in thickness. Now place the sheets of foundation on the table within easy reach, and your hive of empty frames by your side; now take a frame from the hive, lay it on the table with the top bar gainst the strip screwed to the table; place the three-eighth inch board inside the brood frame, having the board lay down on the table. Take a sheet of the foundation, lay it on the board, bringing it up against the top bar so as to bend about one-fourth inch of the upper edge of the foundation at right angles, and press it against the top bar firmly, placing one of the light strips mentioned above, flat side against the under side of the top bar, nail the strip firmly to the top bar with four of the three oz. tacks, pressing the frame against the strip on the table while nailing. Take held of the top bar with one hand and bring the frame to an upright position. With the other hand remove the board from inside the frame. Place the frame in the hive and remove and fill another, and so on until the hive is full, when it should be set away and another put in its place to be filled. After a little practice one can fill frames rapidly, and put in as above directed, are very firm. Care should be exercised that the comb does not hit against the side bars. The temperature of the room should be about 90° so that the comb will be pliable and not F. A. SNELL.

Milledgville, Ill.

#### Morticulture.

#### Pear Blight.

The following remedies for this disease which nas bafiled all our pomologists and scientists to cure or discover the cause of, are furnished the New York Times by two correspondents, one from Pennsylvania, and the other from Ohio.

"The following is a remedy for pear blight that I have successfully used: Wherever the limbs are blighted, cut them off down to the sound wood, then take a brush and apply raw linseed oil to the cut ends and the bark of the trunk and main limbs; after doing this, coat the ends cut with shellac. This remedy has completely arrested the progress of the blight in all of my pear trees, and they are and have been for the past three years as healthy as ever. The application of oil will also destroy all kinds of vermin and their eggs."

"I have had a good deal of experienc with pear blight, having lost many trees some 15 or 20 years ago, since then none when treated as follows: To a gallon of water put in a pound of copperas, and wash the bodies and large limbs of the trees. I usually add a little lime to thicken; put on from the 20th of May to 1st of The water trough should be shallow and June; one application a year has proved a spefrequently filled. In a few weeks green food cific with me. If the tree is diseased, not more should be given and an occasional feed of finely than half dead, cut off the diseased limbs a little below where diseased; wet cloths in the sosects. Young chickens should be fed often and lution and hang over or otherwise fasten on the end of limb cut off. On large trees where the on the ground that the chicks may pick up bark is rough I shave off the rough part with a sharp ditching spade, so that the wash will get a firm hold; put on with a half worn split broom, (convenient as anything). The disease is evidently between the bark and wood, or in the new forming bark."

#### Miscellaneous.

The Indiana Farmer says this is the way it is lone. What do the farmers think about it?

Our professional politician, who is always engaged in shaping and directing public opinion in favor of his party generally, and of himself in particular, just now shows unsual activity in consequence of the impending political campaign. During the day he frequents the street corners, village shops and stores, buttonholing his farmer acquaintances, as they drop in, making anxious inquiry in regard to their health, crops and votes. Under the shades of night he meets in close communion with congenial spirits, bottled and otherwise, and as they term it, "set up the pins" for the next convention. And so well is this preparatory work done, that weeks before the convention is held, the ring has determined on, and knows exactly the ticket that will be nominated. The delegates, the candidates, the managing officers, the speech-makers, resolutions, etc., are all selected and decided upon before the convention is called. The important preliminaries having all been arranged, these patriots issue a call for a convention of their party to meet and select candidates (?) for the various offices. The yeomanry respond, and a "large and harmonious convention" is held. Respectable and inthe convention by the score, put on committees on trivial matters, put anywhere and everywhere that it is likely to tickle their vanity and keep them from interfering with the plans of the managers, and also to bind them to sanction the work of the convention. Of course the cut and dried ticket, no matter how rascal-

#### Latrons of Husbandry.

#### Defense of the Grange.

Mr. Rose is ignorant of the expenses of the grange. Very many who object to the grange know very little if anything about it. The charter fee is \$15, which goes to the national grange. The monthly dues are 10 cents per month, \$1.20 per year, paid to the subordinate grange. The subordinate granges pay to the state grange two cents per month-twenty-four cents per year, and the state grange pays to the national grange, five cents annually for each member in the state. The initiation fee is \$3 for males, and \$1 for females. For each male initiated, the state grange receives one dollar, and for each female, 50 cents. Out of \$1.20 yearly dues, 96 cents are kept in the subordinate grange. Deputies get \$1 for organizing new granges, and 5 cents per mile traveling ex-

If there is any organization run cheaper than the grange, we don't know of it.

The grange forbids the discussion of partizan politics within its gates, and rightly too. Political economy in all its bearings is not forbidden. There never has been an organization among the farmers that has done so much good as the grange. They have derived more practical benefit and information from the grange, than from all other farmers' organizations combined. Habit, prejudice, and ignorance, are the three great causes why the grange is not more successful. Nine-tenths, or more, of the American farmers do not read papers devoted to their principal interest-agriculture. All permanent reforms are brought about by education and that takes time. The grange aims to elevate the farmers so they will not be imposed upon by other callings and it can only be done by education. The grange is not perfect. No human organization is. Look at the imperfect organization and expense of christian denominations, which have received ten thousand times as much hammering and tinkering to perfect W. F. HENDRY. them as the grange.

#### Education and Co-operation.

Nothing short of a sound grange education will ever enable the agricultural classes of America to free themselves from the unjust burdens which they have so patiently borne, and which of right belong to others to bear and for which justice now demands a speedy change.

By co-operation, properly understood and correctly applied, we can remove nineteentwentieths of all the burdens of which the farmers now complain. Indeed there is not a promise made by the organization, or a reform desired by its members that cannot be accomplished by the true method of co-operation. But just as long as we give more heed to strife, sectionalism and partisanism than we do to fraternal co-operation we must expect to bear the burdens that of right belong to others. Co-operation in our order means advancement of agriculture, success of our organization, prosperity of its members, and elevation to a higher manhood and wemanhood.

Let education and co-operation be well studied and understood, as upon the advancement the aggregate amount of millions of tons a year, interests and your organization at your grange the same subjects. Circulate grange literature among neighboring farmers, that they may also become posted and learn of the work being done. And many of them may soon be with you in the co-operative work.

At the last session of the South Carolina State Grange, held in February, Bro, J. N. Lipscomb presented an able address, from which we make a few extracts:

WORK WINS.

In all counties and sections wherever patrons and their officers have done their whole duty, the order flourishes and advances by steady progression, and it is not wrong to say that with the same spirit, devotion to duty, sense of obligation, patient and persistent work, almost all the courties of this state could and would show as creatable and flourishing an exhibit of the or er as Colleton, Darlington, Newberry, Keishaw, Lancaster, York and Spartanburg. In all cases of decline or failure, it is safe to say to those who were in office, "You have done those things you should not have done and left undone those things you should have done." No organization, association, corporation or body of any kind, either social or financial, religious or secular, ever succeeded, or ever will succeed, unless its officers, leaders and members work, and work continuously, in its interest. Whoever made anything a success without devoting to it time, toil, thought and money?

#### SALARIED OFFICERS.

The great mistake made by the officers of our order has been and is that there is no obligation when there is no salary. This rule would ruin any organization, and the very opposite should prevail and be taught by us, that while a man cannot be compelled to assume an office that does or does not pay, when viewed from an individual standpoint, still as a member of any organization he is bound to assume and discharge the duties that may be fairly and impartially imposed upon him at any time for aggregate voice and for the common good he is placed in non-paying offices, then the obligation is imperatively incumbent upon him to either refuse to be installed, or being installed to move among to week to be installed, or being installed to move the set of the s punctiliously and sedulously discharge all du- ous ; if oppla ous, norm

just here must be instituted or inaugurated any Mistakes and Prejudice of Religious and successful attempt to reform or revive our order or society and the civic and political condition of our state and country. Look around and you will see that offices are sought or avoided as suits the views of the individual and not the welfare of the community, and all offices, from the highest to the lowest, are now considered prizes to be obtained by electioneering, manœuvering, chicanery, deception and fraud. This has been carried to such an extent that there is but little pretence now made to public tone and "tine," printed on its label, when the bottle

#### Modern Triumphs of Science.

It is curious to observe the uses to which, through the aid of chemistry, many substances, hitherto regarded as useless, are now advantageously applied. Thus the bones that were formerly thrown away, unless sufficiently large and good for the turner to fashion into knife handles and various ornamental and useful purposes, are now carefully preserved; either the mill grinds them up to a powder for the use of the farmers as a fertilizer, or the chemist extracts phosphates and other valuable matter which used to be such a universal nuisance, and which are even so now to those slow to avail themselves of modern discoveries, are precious stores to the chemist, whence he obtains products often of singular beauty and vast usefulness. Blood, lime, charcoal and other substances, formerly consigned to the dust-heap all now find by the aid of science, active fields in which to expend their valuable and long hidden properties. When these substances have passed through and served the sugar refinery, for instance, they have acquired fresh value in the process and can be again utilized with even more profit than before.

The extraction of the brilliant aniline colors from coal tar, the once totally valueless waste product of the gas works, is another striking example of these chemical metamorphoses in the utilization of waste products. The gas companies were heretofore at great trouble and expense to get rid of their ammonical liquors, but chemistry has created a profitable market for the substance. A late discovery has taught how to utilize another refuse product, the blast furnace slag which has been the superabundant rejection of the iron works of Great Britain, to of these rest the results of the future. Practice its bulk being nearly three times; greater than the discussion of questions pertaining to your that of the iron from which it has been separated in the fusing process, and this article now meetings, read essays and selections treating on serves a useful purpose. The chemist, assisted by the mechanic, has arranged a process whereby it is ground and mixed with cement, and becomes a good material for the manufacture of building brick. These are produced in an ordinary brick machine simply by pressure, require no burning, and are far tougher and nore serviceable than the burned clay article. This pulverized slag is also used to make an artificial stone which is valuable for its great firmness and the ability to mould it into any desired form.

Again this slag is converted into a silicate cotton, strongly resembling cotton wool, a substance obtained by turning a jet of steam on the molten slag. The steam tears up the substance and carries off its fragments in the form of a fine wooly fiber into an air chamber where it is deposited and subsequently collected. This singular substance is found to be excellent for packing into mattresses for the protection of steam boilers, preventing the radiation of heat. The vitreous character of the slag in this form renders it valuable for glass manufacture; being extremely tough it is particularly adapted to the production of bottles and other sorts of plassware which is subjected to hard usage Our farmers know very well that the water in which fleeces are washed becomes impregnated with the greasy impurities with which the wool filaments are coated, and this water used to be thrown away. Not so now, however. Chemis try has taught the farmer to add a little alkali to it, and thus a kind of soap is produced which is available in the subsequent scouring operations of the woolen manufacturer. Nothing more pertinently exhibits the strides of civilization than this utilizing of waste products.

California is happy, according to the reports of the Farmer, which enthuses: "The season now before us opens with the most promising prospects ever before presented to the cultivators of the soil in California. From the snowy mountains on the north and east, to the stormy the common good. Further, that when by the shores of the pcean and sea on the south and west, every 13 inty in our state has been blessed

### Temperance Journals.

Some good religious and temperance journals are making the mistake of declining to advertise a most valuable anti-intoxicating medicine, simply because it is called "Bitters," while the same journals are making a greater mistake by advertising some drunken whisky stuff, or nostrum, because it has some nice, fancy, deceptive name, ending with "eine," morals, and it is rapidly sapping the very is filled with destruction, drunkenness and foundations of society and civilization. The death. If these good journals would take the only remedy is to establish and maintain that trouble to ascertain how many overworked clerrule of our order with regard to office: "That gymen have had their lost nerve-force, brainno man shall seek an office or shirk one;" waste and flagging energies restored by the use "that the office shall seek the man, and not the of Hop Bitters, enabling them to perform their man the office." Patrons, stamp this motto arduous pastoral duties and preach the good upon the banners of your order, and nail it to sermons that they would have been totally unyour masthead; carry it into all the erganiza- able to do but for this valuable medicine, and tions to which you individually belong, whether | did these journals but know of the host of good social, religious, financial, civic or political, and Christian temperance women who rely on them demand that it be made an irrevocable rule, for their family medicine, and how many inand in the near future it will redound in untold | valid homes they could make happy and what good to you and yours, to your country and to glad tidings they could send to every neighborcivilization itself. The existence and continued | hood by publishing the merits of Hop Bitters, vitality of this order in the United States, is no they would advertise them without money and longer an experiment, and it is impossible to without price. And did these journals but foresee, foretell, or estimate its future power and know how many have been and may be saved influence upon society, business and govern- from forming intemperate habits by doctors prescribing Hop Bitters, instead of beer, where the use of hops are needed, (there being more actual hop strength in one bottle of Hop Bitters than in a barrel of beer, without any of the intoxicating or evil effects of beer,) they would lay aside their fear and prejudice against the word "bitters."

A few of the many witnesses from religious and temperance sources are given below, who use, recommend and advertise Hop Bitters.

The president and manager of the Hcp Bitter Mfg. Co. is a veteran temperance advocate and worker of forty-eight years' service; every man in the company is an active temperance worker, and the company spends thousands of from them. The soot, sweepings and sewerage, dollars annually in temperance and Christian work.

> WHAT THE RELIGIOUS PRESS SAY. Chicago, Nov. 18, 1878. Hop Bitters Mfg. Co., Rochester, N. Y.:

Gentlemen-We do not allow anything in the line of Bitters to enter our paper that contains alcohol, but we are satisfied that your Bitters are free from that ingredient. We feel responsible for the good or bad that may be done to the families of our subscribers that are affected by our advertisements. Therefore our discrimination in your favor, and we trust that our very low rates will meet your approval and that we may hear from you .- The Living

Temperance clergymen, lawyers, ladies and docters use Hop Bitters, as they do not intoxicate, but restore brain and nerve waste.-Temperance Times, Bridgeport, N. Y.

#### NOT A BEVERAGE.

They are not a beverage, but a medicine, with curative properties of the highest degree, containing no poisonous drugs. They do not tear down an already debilitated system, but build it up. One bottle contains more hops, that is more real hop strength, than a barrel of ordinary beer. Every druggist in Rochester sells them, and the physicians prescribe them."-Rochester Evening Express on Hop Bitters.

We are not in the habit of making editorial mention of patent medicines, but in case of Hop Bitters, feel free to do so, because their merits deserve to be known .- New York Independent.

Northern Christian Advocate, Syracuse, Nev

Examinar and Chronicle, N. Y. Evangelical Messenger, Cleveland O. National Baptist, Philadelphia, Pa.

Pilot, Boston, Mass. Christian Standard, Cincinnati, O. Home Journal Detroit Mich

Methodist Protestant, Baltimore, Md. Southwestern Christian Advocate New Or leans, La.

Christian Mirror, Portland, Me. And over five hundred more religious and temperance papers.

Pittsford, Mass., Sept. 28, 1878. Sirs-I have taken Hop Bitters and recommend them to others, as I found them very MRS. J. W. TULLER, beneficial. Sec'y Women's Christian Temperance Union.

A MEDICINE, NOT A DRINK,-HIGH AUTHORITY

Hop Bitters is not, in any sense, an alcoholic beverage or liquor, and could not be sold, for use, except to persons desirous of obtaining medicinal bitters. GREEN B. RAUM, U. S. Com'r Internal Rev.

Washington, D. C., Sept. 4, 1879. Dear Sir-Why don't you get a certificate from Col. W. H. W., of Baltimore, showing how RIVERSIDE FARM HERD OF POLANDS. he cured himself of drunkenness by the help of Hop Bittters. His is a wonderful case He is well known in Rochester, N. Y., by all the drinking people there. He is known in this city, Cincinnati, New Orleans, New York:

lieve his card would be worth thousands of dol-

PUBLIC SALE "PLEASANT VALLEY HERD" @F CHOICELY-BRED SHORT-HORN CATTLE!

Advertisements.

Wyoming, Stark Co., Ills., Thursday, May 27th, 1880.



IMP. GRAND DUKE OF KIRKLEVINGTON 2d (34072), My herd having increased beyond the capacity of my farm, I have decided to hold a public sale of about 75 head on the day named above, at my place 3 miles from Wyoming, Illinois.

There will be representatives of the following popular families; Roan Duchess, Miss Wiley, Louan Gwynne, Arabella, Frantic, Rosabella, Ruby, etc. etc., headed by the excellent breeding bull,

Imp. Grand Duke of Kirklevington, 2d. Imp. Grand Duke of Rir\*levington, 2d.
Nearly all the young stock offered was sired by him, and their rich red color, fine style and incividual merit, will convince any one of the superiority of their sire. I do not think a better sire can be found in the state, and his breeding makes him suitable to place at the head of any herd. His get are almost universally a deep red, and I feel warranted in saying there will not be a sale this season that will include so much individual merit and choice breeding combined, A choice lot of young bulls will be included.

ed.

AMOS F. LEIGH of Wyoming will offer about twenty head at the same time.

Wyoming is at the crossing of the C. B. & Q. R. R. (Buda branch) and R. I. & P. R. R. Free conveyance to the farm. Lunch at 12 o'clock.

TRAYS—Six months credit will be given on approved note drawing 6 per cent. interest. 5 per cent. discount for cash. Catalogue ready by April 20th, and sent on application.

GOL JUNY Auctioneer. ent on application.
Col. Judy, Auctioneer.

#### THE

POULTRY WORLD

THE AMERICAN POULTRY YARD,

(Weekly). Both publications are exclusively devoted to Poultry, Published by H. H. STODDARD, Hartford, Conn. The Poultry World is sent post-paid for \$1.25 per year: the American Poultry Yard for \$1.50 per year.

#### Eggs, Eggs.

From pure Light and Dark Erahmas. Write to F. E. MARSH, Manhattan, Kas.



HIGH CLASS POULTRY, C. C. GRAVES, Brownsville, Mo. (NEAR SEDALIA.) Breeder & Shipper.

EGGS FOR HATCHING

### Eggs for Hatching.

L. & D. Brahmas, Buff Cochins, Plymouth Rocks, Brown & W. Leghorns, Pckin and Aylsbury ducks' eggs warranted fresh and true to name. A few trios each of the above fowls for sale. All of the best and most fashionable strains. I also raise and offer for

#### 8 Varieties of New Seedling Potatoes

All of the best; hardy, prolific and good keepers; Alpha, Rulz, Burbank's, Snowflake, Early Ohio, Gen-nisee County, King and Improved Peerless. U. DONOVAN, Fairmount, Kansas. Write for prices.

#### EGGS! EGGS!

ed Light Brahmas, as good Chicks in the fall. Corre-T. S. CLOUGH; Paw Paw

### Bee Hives,

### Italian Bees

Eclipse, New American, Lang-stroth and Simplicity hives com-plete or ready to nail. Full colonies Italian Bees in goed movable comb hives Honey Extractors, Bellows Smokers, Bee Books, &c, Descriptive circulars sent free, Address

F. A. SNELL.

F. A. SNELL, Milledgeville, Carroll Co., Ill.

### Shannon Hill Stock Farm



G. W. GLICK,

### GS.



#### THOROUGHBRED POLAND-CHINAS and BERK-

are marked features of our hogs. Terms rea-style are marked features of our hogs. Terms rea-RANDOLPH & RANDOLPH.

## Established in 1868.

I have in my herd the sow that took first money and sweep-I have it my never and boar under six months that took first premium at Kansas City Exposition in 1873, and the sow, boar and litter that took first premium and sweepstakes over all at the meeting of the Lyon County Agricultural Society in 1879. Thase pigs are all of my own breeding, and are competent for record, I send out nothing but first-class pigs. All stock warranted, and shipped as ordered on receipt of money.

J. V. RANDOLPH, Emporia, Kas. in fact, all over the country, as he has spent thousands of dollars for rum. I honestly be-

The Boss Puzzle. The Game of 15.

#### Breeders' Directory.

BLUE VALLEY HERD.—Walter M. Morgan, Here-ford Cattle and Cotswold Sheep, Irving, Marshall ount y, Kansas. Choice Young Bulls For Sale.

G. B. BOTHWELL, Breckenridge, Mo., breeder of Spanish or Improve dAmerican Merino sheep of Hammond stook, noted for hardiness and heavy fleece. 200 rams for sale.

HALL BROS, Ann Arbor, Mich., make a specialty of breeding the choicest strains of Poland-Ch Suifolk, Essex and Berkshire Pigs. Present prices 2 less than last card rates. Satisfaction guaranteed. 2 few splendid pigs, jilts and boars now ready.

OSHUA FRY, Dover, Shawnee county, Kansas, Breeder of the best strains of Imported English Berkshire Hogs. A choice lot of pigs from 2 to 8 months old for sale. Prices to suit the times. Correspondence solicited.

POR SALE. Scotch and black & tan ratter pups, \$10 Reach: shepherd pups, \$15 to \$25; also pointers and setters. These are lowest prices. All imported stock. A. C. WADDELL, Topeka. MILLER BROS, Junction City, Kansas, Breeders of Recorded Poland China Swine (of Butler county Ohio, strains); also Plymouth Rock and Brown Leg-horn Fowls. Eggs, \$1.50 per 13. Descriptive Circu-lar and Price List free.

#### Nurserymen's Directory.

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

A. WHITCOMB, Florist, Lawrence, Kansas, Cat-

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

#### Dentist.

A. H. THOMPSON, D. D. S., Operative and Surgeon A. Dentist, No. 189 Kansas Avenue, Topeka, Kansas,

#### JAMES A. BAYLES.

Lees' Summit, Jackson County, Mo., Has the largest and best Nursery Establishment in the West. Correspondence promptly answered.

### Berkshires for Sale.

I have a few choice pigs to spare. All elligible record and as good as there is in the state.

W. P. POPENOE, Topeka.

### BERKSHIRES

**COLLEGE FARM** 

## We offer for sale a few litters of very choice pigs' the get of such noted sires as imported Mahomet 1979, Gil Blas 2627,—a son of Lord Liverpool--and others. "Sallies", "Et Bridges" and "Miss Smiths" in the herd. Pigs ready to ship now. Also

SHORT-HORNS,

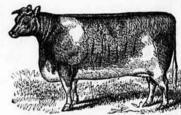
#### E. M. SHELTON. Supt. Farm, Manhattan, Kansas.

### **PUBLIC SALE**

Short Horn Cattle Southdown Sheep AT KANSAS CITY STOCK YARD May 12 & 13, 1880.

The breesers of Jackson county, Mo.. will offer at public sale, without by bid or reserve, at the Kansas City Stock Yards. May 12 and 13, 1889, 160 head of SHORT HORN CATTLE—80 bulls and 80 cows and heifers—and about 60 head of Southdown sheep. The cattle are all of the leading and \*tandard families, nearly all bred and raised in Jackson County, Mo.. cattle are all of the leading and standard families, nearly all bred and raised in JACKSON COUNTY, Mo., and are thoroughly acclimated to the western climate. TERMS OF SALE:—Cash or approved note at four months bearing interest from date at ten per cent. The following railroads will give reduced rates on eattle purchased at this sale, to all points on the line of their roads; The Kansas Pacific, Atchison, Topeka & Santa Fe; Kansas City, Fort Scott & Gulf; Kansas City, Lawrence & Southern and the Missouri Pacific The above roads except the Missouri Pacific will give reduced rates to passengers attending this sale, on their return tickets.
Catalogues will be furnished upon application to J.T. Smith, J. P. Alexander or to C. C. Chiles, Independence, Mo., after April 10th.
Special attention is called to Capit, P. C. Kidd's combination sales on the 5th, 6th and 7th of May.

Col. L. P. MUIR, Auctioneer.



**PUBLIC SALE** OF HIGH-BRED

CATTLE, Tuesday, May 25, 1880.

At my Farm,

3 Miles from Leavenworth, Ks.

I will sell at auction, at my farm, 3 miles from Leav-enworth, Kansas, 51 head of high-bred cattle, con-sisting of 17 bulls and 34 cows and heifers of the fol-lowing families:

Princess, Georgia, Oxford, Lady Newham, Young Mary, Belina, Phyllis, Ianthe. Lady Elizabeth.

And other equally good and well known families.

Of the 17 bulls one is by the 14th Duke of Thorndale
and six by the 4th Duke of Hilhurst.

The cows and heifers are splendid, many being
show animals. All red but six, roan. All the females will be bred or have (calves at their sides, or
both, on day of sale. oth, on day of sale. All recorded and all guaranteed in all respects.

TERMS. Six months on approved paper, with a rebate of er cent, for cash. Sale will commence promptly at one o'clock. Catalogues sent on application after April 1st

J. C. STONE, JR.

#### THE KANSAS FARMER.

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

TERMS: CASH IN ADVANCE

The greatest care is used to prevent swindling humbugs securing space in these advertising columns. Advertisements of lotteries, whisky bitters, and quack dectors 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 Farner.

TO SUBSCRIBERS.

Subscribers should very carefully notice the label stamped upon the margin of their papers. All those marked 18 expire with the next issue. The paper is al 18 ways discontinued 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.

#### Quarterly Report of the Kansas State Board of Agriculture.

The quarterly report ending March 31st, has been on our table several days, but we have not had time to give it a careful examination earlier. The data of crops and fruit prospects is not later than March 15th, and the showing at that time for fruit and fall wheat was encouraging, but the continuation of dry weather and severe winds and frosts since have modified the statements on which the prognostications of the first quarterly report for 1880 is based, for the product of fruits and grain for the present year, so of agriculture will have made a long stride foressentially that the appearances up to March 15th will prove a very unreliable indicator.

The main feature of the report, and the one constituting its chief value, is that part devoted to the swine business of Kansas. This department of the report is full enough and sufficiently varied to make it of much value to farmers. The experience and practice of some of the most successful swine breeders among the farmers of nearly every county in the state, are compiled, giving a careful, and what must prove of great utility to others, a brief statement of ten to twenty year's experience of these men in raising hogs for the market, comprising the treatment and breeds generally in use. The Berkshires and Poland Chinas are almost universally the hogs preferred by these men, and their experience is the best possible endorsement these famous breeds could have. This department usurps the largest part of the report and the space is well appropriated.

The preceding quarterly report was largely devoted to the sheep and wool interest of the state, which are so rapidly becoming prominent, This is an humble, unassuming and inexpensand followed by a presentation of the swine and swine interest, is a happy change in these farming lately that will prove more useful to reports which the changed conditions and material progress of the state demand. There is gaged in agriculture either on a small or large saw the growing crops on which I had applied ample material in this field for future reports, which can be used by the Board, to be of great more useful matter in so convenient a form for such marked effect, and such increase from the per acre with good effect. service to the agriculture of the state which, fifty cents, which is the price post-paid. Every application of the fertilizer, that some decided unlike the older commonwealths, is in a condition of development. That the agricultural interests grow in the direction which will prove most advantageous and profitable, is of paramount importance, and the State Board of Agriculture occupies a position to materially aid in this development.

#### Make Professors of Your Sons.

We do not mean professors of one or more of the occult sciences, of metaphysics, of law, of divinity, or any of the numerous book-worm closeted professorships, useful in their way, but not applicable or fitted for a majority of our farmer boys, but professors of agriculture who can fill the position of managing directors of every branch of agriculture in the field, as the general directs an army or an engineer the construction, equipping and running of a railroad. There will be a large demand, in the near future, for scientifically educated men in agriculture, men who can take charge of an estate and direct its management so as to produce the best practical results from every branch of industry embraced in the plan of the owner. If such men were more plentiful, capitalists would invest much more in agriculture than they do. The wealthy denizens of the city long for the smell of the soil and a taste of fresh, country air, and none but themselves can know the anxiety such men feel whose all hangs on a turn in the tide of business which is liable to strand the two hundred fowls, which the writer says them at any moment, and involve all that toil, he manipulates thus: "I strew the sand over auxiety and worry of years have cost to gain, in the floors under the roosts and rake up the shipwreck and ruin. Nor is this the whole cause of their anxiety. The raising of a family of young children in the foul atmosphere of dities where unwholesome food and drink supplement the poisoned breath of the town, and sweep thousands of children into untimely graves, is a source of perpetual anxiety and anguish to the most opulent. And after they have passed the critical period of childhood, the poison of a moral atmosphere, which is a constant menace to youth, is no less a source of anxiety and apprehension to fond parents.

The wealthy capitalists of large cities are the men who dread the cities, for they know the danger and corruption that lurk in every street and alley, and fain would shield their families fowls in a year, while they are en the roost, but of the contents of the antiquated vaults, and of the use of 150 pounds per matter what from these dangers by homes in the country, if it is more probable that not ene will have any others more modern, as I desired to use during the crop was, was as useful murning in the crop was, was as useful murning in the crop was, and application of the use of 150 pounds per matter what others more modern, as I desired to use during the crop was, was as useful murning in the crop was was as their investment in a farm would pay even but definite idea of the amount voided, so all are my five-year lease of a farm of seventy acres.

have been educated in practical agriculture, as engineers are educated to field work, and it is the design of agricultural colleges to fit boys for just such positions, who can take charge of a farm and apply a scientific agricultural education to the practical business of the farm, so that a profit will be returned to the owner, in place of a long list of bills to foot out of income derived from other sources, as is the experience at present with most of those who try farming where other parties have to be depended upon to supply the knowledge which is to manage the farm.

It is no longer a question that education applied to farming will produce results far superior to a blind routine practice, and a few of adapting their course of instruction to achieve such desirable ends, and notably among these is the agricultural college of the young state of Kansas. The course of instruction followed in this college is the lesson taught in the classand the field, where the hands are taught as well as the brain, and where the student is conducted from the imperfect laboratory of the professor to witness perfect process going on directly under the hand of nature. In a word, the old system of teaching by observation, which filled Greece with renowned philosophers, is being renewed by our most advanced agricultural schools.

Every farmer in Kansas who can possibly do so, should send his sons to the state agricultural college to complete their education. The school is a very economical one, and if well supported the advantages, as superior as they by purchasing them of near and remote neighalready are, would be much improved.

When colleges begin to graduate professors of agriculture who can go into the field and prove to an admiring world that they are worthy the title which their diploma announces, the cause ward and upward, and its cause will then find champions in the senate and all the halls of legislation, and the competent, educated student will find employment for his talents without the crowding and elbowing which is witnessed in all the avenues of trade and the choked, narrow channels of the professions.

#### The Farmer's Friend and Guide.

The world daily grows more practical. We have on our table an annual bearing the above title published by Frank Harrison & Co., 206 and 208 Broadway, New York, quarto form, containing 200 pages, printed on stout paper, and bound in thick, flexible paper covers. The new publication is really a farm scrap-

book, composed of articles selected from the issues of all the standard agricultural journals of the country in the course of the last year. The matter is classified and placed under department heads, so that a number of articles on any branch of farming, is at once come-atable. ive book, but we have not met with a work on the majority of people who are in any way en- but some of the most wary visited my farm and scale. It would be difficult to get together the substances purchased of them. They saw penchant for farm literature, should order a the time for collecting the materials recurred, copy. It would be difficult to invest a half dol- I instructed my man to pass by those who had lar more profitably.

The professional card of D. C. Bryant, M. D., surgeon and oculist, will be found in the FARKER this week. Dr. Bryant has made the eye and its diseases a special study in the hospitals of London and New York. Office at present above 7th, east side of Kansas Avenue, over G. B. Palmer's (undertaker) rooms.

Will Mrs. A. B. Prescott, whose communication was published in the KANSAS FARMER of April 21st, please send her post office address to this office, as we have several letters awaiting

We acknowledge receipt of complimentary ticket from the secretary of the Topeka Driving Park Association, Mr. C. R. Jones, to Spring Meeting, May 11th, 12th and 13th.

#### Composting Fertilizing Substances.

ED. FARMER: In your issue of April 14th, I find an article extracted from the organ of the Elmira (N. Y.) Farmers' Club, headed "Valuable Information." It contains sundry valuable practical suggestions that are worth reading. It describes the practice with the droppings of droppings weekly. This I compost in the spring with coal ashes and plaster, (gypsum, or sulphate of lime), and make it fine as practicable and then sift it. I use the fine for topdressing and in the hill, and spread the coarse on the surface to be worked in." He concludes with: "I had about two tons of this excellent fertilizer last spring."

The reader will observe that the above recipe specifies no quantities, or proportions of the four ingredients in said "excellent fertilizer." One in one thousand of those who read that specification or indefinite formula for a compost, may possibly know about what bulk of droppings will be voided by a given number of

structions are of little value to those seeking etc. I obtained the coal ashes for the handinformation.

Let us examine the nature of the four ingrerespective value and see if they are all valua- ducing a dry compost of a convenient texture ble, or as much so as others that might have for handling and applying to crops. been used at the same, or less cost.

Farmers who know nothing of chemistry, are for want of a knowledge of the chemical action that the incorporation of substances of the nature of those mentioned, to produce a chemical action that will materially deteriorate the ferthe agricultural colleges of the country are tilizing qualities of some of the substances composted. Hence it is imprudent for farmers who are ignorant of the chemical preperties of substances which they desire to use as fertilizers. to compost by a random formula. The writer has used as a fertilizer a larger quantity of the room practically demonstrated in the workshop droppings of dung-hill fowls than any one in the country, as far as he knows, and he may say the same with regard to the use of unleached wood ashes as a fertilizer, both of which he found, when judiciously applied, very active and valuable.

As evidence of the estimate he put on these substances as fertililers, he would state that he experimented with the use of both, on a variety of crops, as early as 1838, and having fully ascertained their respective value, which was eight to twelve-fold more than farmers generally estimated them at that time, he instituted a means of securing the amount required of each,

I sent out a man at times when the sleighing was good, with a two-horse sleigh, the capacity of the body of which was fifty bushels. I prowided a shed with an earth floor for storing and manipulating, keeping each substance by itself. continued this practice for eight years.

When I commenced to collect I found it very difficult to find either housed unleached ashes or hen manure, as the ashes were usually thrown in heaps out of doors, and the fowls roosted in trees and the droppings were wasted. I, however, collected about three hundred bushels of ashes and one hundred bushels of hen droppings the first winter. I paid four cents per bushel (cash) for each. The price was considered so liberal that those of whom I purchased told the neighbors, and I made in that way an active agent of each of those from whom I had purchased, who reported that I would not buy at any price unless the substances were pure, and had been kept under shelter. I bought with hard money, and money was very hard to get in those days, and a silver dollar was so large in the eyes of many that it would hide from view a mountain. I often heard incidentally, of the vendors exulting over the grand sale they had made to the book-farmer. of ashes and hen-dug at four dollars per hundred

The result was that I was able to get all that I required the second year at the price named, hat they would sell me resolved not to sell to me any more, and to pay to others six cents per bushel, if he could buy them for no less. He paid six cents to a few, which was soon heralded, and some of the dissenters hailed my man as he passed, and asked if he was paying all the advanced prices. The man replied he was paying that for the best. Of course all claimed to have the best, and I had no difficulty in obtaining my complement. But by the eighth year I was obliged to pay 25 cents per bushel for the ashes and 25 cents to 30 cents for the hen manure.

The farm on which I used these fertilizers is located in Dutchess county, New York. I sold the farm and removed to a farm which is now a district of the city of Philadelphia, Pa. I have never heard of any sales of these products in that region since I left.

Before I left New York, I had been conducting a farm school and experimental farm for three years, and had at the time of my removal fifteen pupils, who were paying me \$150 per annum and their labor, for board instruction. I removed my school, which was called the Dutchess Agricultural Institute, to Mount Airy, Germantown, Pa., now Germantown District of the city of Philadelphia, where I rechristened the school the Mount Airy Agricultural Institute. Here I found that soap-makers had gleaned the ashes, and families kept but few fowls, so I looked about for a substitute, which I soon discovered. As a history of the new departure may be instructive as well as amusing to some readers of the FARMER, I will

Germantown was an early settled district, and the settlers had imported an old German custom of providing deep, spacious privy-vaults, so that they might serve indefinitely, but some of them had been in use over one hundred years, and fortunately for me the borough had recently passed an ordinance that such vaults as the inspector condemned as a nuisance, must have the contents removed or be filled by a time. I made a very fauorable arrangement with the inspector, by which I secured as much one per cent. But such investments are gener- left as much in the dark with regard to the bulk I erected sheds on a site nearly central on the

ling, and had some hauled to my rude laboratory for a trifle. I found no difficulty in fixing dients used in the compost-investigate their the offensive odors of the night-soil, nor in pro-

To be brief, I had, with little boring, "struck ile," and had the materials for growing crops liable in their attempts to mingle substances to to pay the thousand dollars' annual rent which produce a so-called compost of greater value I had agreed to pay, for five years, for seventy than the uncomposted components, not only to acres. The records of the Philadelphia County perform useless labor, but they are also liable Agricultural Society attest that it awarded prizes for the sundry crops of the Institute farm, the credit of which was largely due to the poudrette above described, with which they were nour-

> It pays to learn how to obtain, how to prepare, and how to apply good, cheap food to arm crops, and the prizes that this knowledge secures is a netable part of the return, which, n the form of medals, I find that my grandchildren hold as sacred mementoes.

> To return to the method practiced by the member of the "Elmira Farmers' Club," in composting, I would say, 1st, that dry clay would have been much preferable to the "sand and coal ashes," which he says he used in his compost. It is not necessary that the clay should be pure clay. I have always obtained what I required for such purposes by selecting a clayey portion of a wagon-road, in a drought, (which I am led to believe that Kansas farmers will not be obliged to import), and scraping up the dust on the road-bed into heaps, and hauling and storing it against a day of need.

> I paved with smooth, flat flags a portion of my fertilizer shed, and on it I pulverized the droppings with flails. Then I added two parts of dry clay to eight of the pulverized droppings, and the two were well incorporated, when I added one bushel, or one hundred pounds of finely ground plaster, and one bushel of finely ground salt. When these were well mixed, I found I had a compost which benefited all crops to which I applied it, but it was too caustic to apply in the hill on seeds or po

> The ammonia of the droppings is fixed or rendered involatile by the plaster, which is a sulphate of lime. The sulphur unites with the of a corbonate of ammonia, a volatile form, and changes it to a sulphate of ammonia, an involatile, in which form it is more valuable as plant food and equally available. Then the salt is hygroscopic, i. e., it has the quality of absorbing vapor or water from the air or earth, if in contact with it, and it being, when finely pulwith its saline property to a considerable depth, which gives to it the hygroscopic quality, one of special value in a soil in times of drought.

> It may be of interest to readers if I state, at that I was before the country as a counsellor in marked effects, however, were observed on land

se of salt, that when properly applied it pos sessed a property that was vastly more valuable than its fertilizing one. I refer to its distinctive effect on vermin in the soil, such as grubs, or cut-worms, etc. The modus operandi when such effect was the aim, was to have the salt ground fine, and to apply it on the surface of a sward inverted for corn, immediately after plowing. Fifteen bushels per acre, evenly applied, I found sufficient to destrey the vermin named; and I have left portions of fields without the application, and the corn was nearly all destroyed on the unsalted land, while on the salted portion, lying side by side, no marks of the work of the insect were to be seen. I have also applied the salt on corn land, as above, in which there proved to be few, if any, of these destroyers in the soil, and by applying different quantities, and leaving belts without any, I found that ten to twenty bushels of salt per acre, in some instances, increased the product from fifteen to twenty-five per cent., but in others the effect was less marked, but I have no record of an application of ten bushels per acre where a considerable increase of crop was not attained.

I applied the salt on a great variety of geoogical formation, with good effect on all, but with the best result on sandy soil, and in dry easons. Salt, to be most beneficial, should be applied on the surface, that it may, as it dissolves, charge the entire soil.

Both wood and coal ashes contain, when fresh, more or less caustic lime, and when applied to hen-droppings in that state, are injurious, as the lime unites with the ammonia, producing a volatile gas, which, as already stated, is liable to be lost. A proper proportion of the gypsum mixed with the ashes and droppings will prevent such loss.

The quantity of gypsum required in each ase may be readily determined by simple quantitative experiment. It is not judicious to use any more gypsum in the compost than is required to produce the chemical effect intimated.

I have experimented very extensively with plaster as an application to farm crops, varying the amount applied from 100 pounds to 2,000 pounds per acre, and the colWE attained with eral applicatiou.

It was my purpose the gr

generally practiced, and in which large sums of money are annually squandered, but the number of the pages of my manuscript warns me that I must close. I may, however, make it the subject of a future paper.

I will only say, in conclusion, that all plant food available on the farm, is the owner's stock in trade, and all who allow it to go to waste, will be apt, sooner or later, to learn the true nature of a mortgage. J. WILKINSON.

Brooklyn, N. Y.

#### Good Words.—State Horticultural Soeiety, Etc.

For the thirteen years that I have known the KANSAS FARMER intimately, there has never been a time, at this, the busy season for farmrs, when the correspondence has been so extensive and practical—therefore valuable, as it has during the issues for the present month. The careful editing of the same, too, speaks well for the judgment of the editor. Well, what of it? Simply this: It indicates that the coming farmer will be more of a farmer in intellectual stature than his father was, is taking a more active interest in his calling, and shows that the first gray glimmer of dawn is breaking upon his mind that farming is a business.

A correspondent voted for the proceedings of the State Hort icultural Society to be published in the FARMER. I second the motion. But let me whisper anew about that same State Horticultural Society that all your readers may not know as well as I do. They are a very dignified body and rarely, very rarely, grant favors without the asking. There was a time in the history of the state when the struggle was sharp and the battle warm between the State Horticultural Society and the State Agricultural Society, to see which should be the kite and which the tail, and from certain personal reasons not necessary to speak of, because they have passed away, the State Horticultural Society imagined, and it was only imagination, that the FARMER aided and assisted the State Agricultural Society and its successor more than it did the former, but it was a mistake. There never has been a time before nor since when the proceedings of the Society were so fully published and extensively read as during ammonia in the droppings, which is in the form the principal period of this antagonism, viz: 1870-4, as back files of the FARMER show, and as C. H. Cushing, the stenographer of the FARMER, then), can testify. But we farmers want to see the reports of the State Horticultural Society, and the only way to get them, Mr. Editor, is for you to courteously indite a postal card to Mr. Brackett, asking to be verized, very soluble, it soon charges the earth advised of the time and place of the summer meeting, and when the time arrives, start a reporter with his gripsack, and let him follow the

I wanted to discuss (if so minded you can leave off the first three letters of that last word. this juncture, that during the twenty-two years but not to be charged to my account, remember) some of the many so-called rules for measuring agricultural practice, I often prescribed the ap- corn in the crib. They are all humbugs, and plication of common salt on a great variety of the old standard measure of two cubic feet to crops, and with satisfactory results. The most the bushel, the worst of the lot for the buyer and the seller, too, if he has any conscience. lying more than five mlles from the sea coast. The best measure to guess by that I have ever I have applied from five to fifty bushels of salt found, is the following: Allow 4,000 cubic inches for a bushel. Find the cubic inches of I found by a series of experiments with the a crib, box, or bin, and divide by 4,000. The answer will be in bushels. The idea is it takes pretty near 2½ (cubic feet to make a bushel of our average western corn.

Corn planting pretty well along. Season two to three weeks in advance of the average. Wheat two-thirds of a stand. A. G. CHASE.
Millwood, Worth Co., Kansas.

The above complimentary notice coming from a former editor of the FARMER, we cannot but feel highly flattered, and having no personal acquaintance enhances the tribute. We feel that some kind spirit has created a friendly bias in our behalf which we hardly merit, but that rather we owe whatever measure of success we have achieved, to the extreme kindness of our numerous correspondents, who have placed us under obligations which our most industrious efforts will not be able to requite. Many thanks to Mr. Chase and others. for aid and encouragement in the new field which is opening up and revealing glimpses of the bright beyond for the farmers. To those who have been permitted to look through the "gates ajar," the future of the agriculturist in that mental view is not less fair than the promised land appeared to Moses as he surveyed the plains of Palestine flowing with milk and hency beyond the Jordan. May the present generation not be shut out from the promised enjoyment, as the leader of Israel was.

#### Important to Book Agents.

Dr. Manning's long looked for object teaching Stock Doctor and Live-Stock Encyclopedia, with 1,000 pages, 400 illustrations and two charts, is announced by N. D. Thompson & Co., publishers, at St. Louis, Mo. It covers the subjects of Horses, Cattle, Sheep, Swine and Poul-try, in health and disease, and is a work of such practical character and value as to be in great demand. A rare chance for agents

#### Go to Skinner, the "Old Reliable" Shoe Dealer of Topeka.

Piles! Piles! Piles!

Do you know what it is to suffer with Piles! If you do, you know what is one of the worst torments of the human frame. The most per-fect cure ever known is Kidney Wort. It cures constipation, and then its tonic action restores health to the diseased bowels, and prevents re-currence of the disease. Try it without delay.

An Extended Popularity.—Each year

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Oil pour taste who sive objecte is might and Lim bed sale by a

NICKERSON, Reno Co., April 18.-200 miles SW. of Topeka. The seasons for 18 months have been more unfaverable here than I have known for 15 years. We had a good rain in November. None since, amounting to anything and only about one and a half inches of very dry snow during the winter. A great many dry snow during the winter. A great many windy days this spring. Considerable wheat killed by freezing last month. It is wonderful how the soil holds moisture. Many farmers are feeling blue, and it is not strange that they should. A large acreage of corn will be planted. Many are planting now unfavorable as the prospect is. Calves, yearlings, &c., are in good demand at fair prices. Pork, 3 to 3½ gross; bacon, 8 to 9c; salt pork, 7 to 7½c; corn, 24c; coats, 30; butter, 25; eggs, 8c. Plenty of hands can be hired at 50 cents per day to work on farms. Groceries, clothing, etc., high. We predict another crash before many months. We like the ring of Mr. Peck's article. Success to the FARMER. W. F. HENDRY.

#### Regulate the Secretions.

In our endeavors to preserve health it is of the utmost importance that we keep the secre-tory system in perfect condition. The wellthe timest importance that we keep the secre-tory system in perfect condition. The well-known remedy Kidney-Wort, has specific ac-tion upon the kidneys, liver and bowels. Use it instead of dosing with vile bitters or drastic pills. It is purely vegetable, and is prompt but mild in action.

#### Winter Butter.

Let a farmer divide his white winter butter into two lots, while yet in the form of cream, and for one make use of Perfected Butter Color, made by Wells, Richardson & Co., Burlington, Vt., while the other goes to market without color, and he will discover on what course his interest depends. This color gives the fine, rich, golden yellow of first quality June butter, and is not tinged with the dull red that is objected to in most butter colors.

#### Timely Caution.

Genuine Hop Bitters are put up in square paneled, amber-colored bottles, with white la-bel on one side printed in black letters, and green hop cluster, and on the other side yellow green hop cluster, and on the other side yellow paper with red letters; revenue stamp over the cork. This is the only form in which genuine Hop Bitters are put up, and the sole right to make, sell and use them is granted to the Hop Bitters Manufacturing Company, of Rochester, N. Y., and Toronto, Ont., by patents, copyright and trade mark. All others put up in any other way or by any one else, claiming to be like it, or pretending to contain hops, by whatever names they may be called, are bogus and unfit for use, and only put up to sell and cheat the people on the credit and popularity of Hop Bitters.

#### Greater than Gold.

"I value Marsh's Golden Balsam far greater than gold. It has cured me of incipient consumption, and my child of a terrible cough."—
[Mrs. Emma Allen, 3t. Joseph, Mo.

"For several years I suffered with a cough and an affection of the throat and lungs. I used many medicines, none of which did me much good. I was discouraged. Finally I tried Marsh's Golden Balsam, and this great remedy cured me. I hold it in high esteem."—[C. H. Jones, Lawrence, Kans. Jones, Lawrence, Kans.

Marsh's Golden Balsam is for sale by all

prominent druggists. Large bottles 50 cents and \$1.00. Sample bottle free.

#### Good Evidence.

When such men as Rev. Dr. Rankin, Rev. Dr. Harvey, Prof. Green, Dr. Bartine, Col. John K. McChesney, E. W. Neff, and a host of others equally trustworthy, certify over their own signatures to the marvelous efficacy of Warner's Safe Kidney and Liver Cure, in the diseases for which it is recommended, it is time to dismiss doubts on the subject.

From the "Old Salamander" Drug House,
Chicago, Ill., Jan. 12, 1880.
Messrs. H. H. Warner & Co., Rochester, N.
Y.: Gentlemen,—We trust our order will reach
you in season to be premptly filled. The demand for your Safe Remedies, especially the
Safe Kidney and Liver Cure, is continuous and increasing, and our customers speak in the highest terms of their value. Several cases of cures which have come under our observation are com-Plete and most remarkable. Very truly your Van Schack, Stevenson & Co.

The sale of lands during the month of March, by the Kansas Division of the Union Pacific Kailway company, formerly Kansas Pacific Railway, were 16,474 acres.

#### The Recipe

for Gilt-Edge Butter Maker was obtained from one of the most extensive dairy farmers in Ireland, noted for the excellent and superior keeping qualities of his butter, which was eagerly purchased by London dealers for export to India, where the warm climate puts butter to a very severe test. It has been thoroughly tried by a large number of the very best butter ma-kers in this country, and they have given it their emphatic approval. Price 25 cents per package. Sold by all storekeepers.

Collins, N. Y., Feb. 19th, 1879.
Gentlemen—We churned one gallon of cream to-day at a temperature of 56 deg., using your Gilt Edge Butter Maker. Time of churning, 15 minutes—result, 44 pounds of butter. Color good. As we have not previously weighed our butter, of course we cannot tell whether there is a better per cent. or not, but appearances indicate it, and the quality is at least two cents per pound better. Yours, &c.,
M. E. WILBUR, Prop'r of Collins Creamery.

Wilbor's Compound of Pure Cod-Liver Oil and Lime.—The advantage of this compound over the plain oil is, that the nauseating taste of the oil is entirely removed, and the whole rendered entirely palatable. The offenwhole rendered entirely palatable. The offen-sive taste of the oil has long acted as a great objection to its use; but in this form the troub-le is entirely obviated. A host of certificates might be given here to testify to the excellence and success of Wilbor's Cod Liver Oil and Lime; but the fact that it is regularly prescribed by the medical faculty is sufficient. For sale by A. B. Wilbor, Chemist, Boston, and by all druggists.

Always buy "The Best" at Skinners.

Mr. T. K. McGlathery of Topeka, has made

A Good Piano.

Frank Leslie's Illustrated Newspaper says: A good piano at a fair price is one of the wants of the times. An instrument that is durable, of the times. An instrument that is durable, that is substantially made, and has all those qualities of tone which make a first-class piano, can be had from the Mendelssohn Piano Co., New York, from \$150 to \$400. For over thirty-eight years their factory has been producing pianos, and adopting every new invention which has proved itself to be valuable. They can be compared by an expert with the instruments of the highest name and fancy price, and the result is surprisingly satisfactory. The piano is warranted for five years, and no purchaser has ever made a complaint. From personal knowledge and critical examination we can recommend any one to send for a catawe can recommend any one to send for a catalogue to the above mentioned manufacturers.

The McKay Bros. are going to start a large fish, oyster game, poultry, butter and egg depot in Deaver, Oolorado, early this fall. The farmers in and around the vicinity of Topeka will find a cash market for all kinds of poultry, game, butter, eggs, &c., at McKay Bros. fish, oyster, game and poultry depots, No. 249 Kansas Avenue, near 8th avenue, South Topeka, and No. 90, Kansas Avenue, near Laurent street, North Topeka, for which the highest cash price will be paid as they will depend principally upon Topeka to furnish their Denver market with poultry, butter, eggs, &c.—North Topeka Times. ----



Mrs. Wise-No doctors' bills for the past year

Mrs. Wise—No doctors' bills for the past year, and less than five dollars for medicine, and eight in the family.

Mrs. Jones—Would that I could have a like experience with my family.

Mrs. Wise—You can, if you will make Simmons Liver Regulator your household remedy. From the youngest to the oldest, we take the Regulator whenever we feel dyspeptic, billious, feverish, or out of sorts, and it always relieves the stomach, regulates the bowels and quiets the nerves.

the stomach, regulates the bowels and quiets the nerves.

"I have used your family medicine, called Simmons Liver Regulator, for several years, and find it the best medicine for a family to keep in the house. I can eat anything I wish at night, and take a dose after it, and sleep as sound and sweet as ever. I have not spent one dollar for my family for medicines in five years, only for your regulator and must say it does all only for your regulator, and must say it does all it says it will.

J. A. NELSON,
Merchant, Macon, Ga."

8 and 9 63
Eight and nine per cert, interest on farm loans In Shawnee county.

Ten per cent. on city property.

All good bends bought at sight.

For ready money and low interest, call on

A. PRESCOTT & Co.

PRESCRIPTION FREE For the speedy cure of Seminal Weakness, Loss of Manhood, and all disordeas brought on by indiscre tion or excess. Any Druggist has the ingredents' Addioss DAVIDSON & CO., 78 Nassau St., N. Y.i

#### Markets .

#### TOPEKA MARKETS. Poultry and Game.

Corrected weekly by McKay Bro's., 294 and 92 Kansas Avenue.
CHICKENS—Live, per doz.     2.00@2.75@3.00       " Dressed, per lb     .08       TURKEYS—Live, per lb     .08       DUCKS—per doz.     2.00@2.50
Hide and Tallow.  Corrected weekly by H. D. Clark, 135 Kansas Ave.

HIDES—Green
Green, calf.
Bull and stag
Dry flint prime
Dry Salted, prime
Dry damaged
TALLOW
SHEEP SKINS.

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

| Butchers' Retail. | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12½ | 12

| Produce | Grocers retail price list, corrected weekly by J. A. Lee | Country produce quoted at buying prices. | APPLES - Per bushel | 3.00 | BEANS - Per bu-White Navy | 1.90 | 1.75 | 1.90 | 1.75 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | Produce.

#### St. Louis Wool Market.

The New Clip comes in slowly, yet a steady if slight Increase in receipts is noticeable; and with the larger offerings has come a weaking in price. Unwashed, 21½ to 32½6 for slightly burry and 35c for choice medium; tub washed at 51½6 for black and 56½6 for choice. We quote: Tub-washed—choice 53 to 55c, medium 48 to 50c, dingy and low 40 to 45c: Unwashed—medium combing 35 to 35c, coarse and common do 28 to 31½6, medium 33 to 33½c, coarse and low 28 to 30c, light fine 25 to 27c, heavy fine 22 to 23c. Burry, black and cotted, 5 to 15c per b less.

Chicago Wool Market.

Markets by Telegraph, May 4.

#### New York Money Market.

GOVERNMENTS—Dull and somewhat weak.
RAILROAD BONDS—Irregular.
STATE SECURITIES—Steady.
BAR SILVER—\$1 14%,
MONEY—5 to 6 per cent.
PRIME MERCANTILE PAPER—5 to 6 per cent.
STERLING EXCHANGE—B, B, dull; 60 days, \$4 84%, sight, \$4 87%.

GOVERNMENT BONDS. Coupons of 1881 New 5's..... New 4½'s (registered)... Coupons... New 4's (registered)...

PACIFIC SIXES—95; new 126.
MISSOURI SIXES—\$1081/4.
ST. JOE—\$106.
C. P. BONDS—\$1 121/4.
U. P. Bonds—first, \$1 12.
LAND GRANTS—\$1 11.
SINKING FUNDS—\$1 151/4 offered.

#### St. Louis Produce Market.

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#### St. Louis Live Stock Market.

St. Louis Live Stock market.

HOGS—Lower, fairly active; Yorkers, \$1 15 to 4 25 bacons, \$1 20 to 4 30; butchers to select.4 20 to 4 35; receipts 11,900; shipments, 1,900;
CATTLE—Shipping grades slow; butcher cattle and light native steers from 900 to 1,100 pounds, active, with only a moderate supply at \$375 to 4 00; good to prime shipping steers, \$4 00 to 4 25; prime to frucy, \$4 40 to 4 80; cows and heliers, \$250 to 3 25; good feeders \$3.75 to 4 00; good stockers, \$3 00 to 3 40; receipts, 2000; shipments, none.

SHEEP—Scarce and firm; fair to fancy heavy, \$4.50 to 6 00; elipped muttons, \$4 to 4; receipts, 900; shipments, none.

#### Liverpool Market.

BREADSTUFFS—Market quiet. FLOUR—10s to 12s 6d. WHEAT—Winter, 9s to 8d 10s 6d; spring do 9s to

0s, CORN—New, 4s 8d, CHEESE-75s, OATS-6s, 6d, PORK-60s, BEEF-75s, BACON-Long clear middles, 34s; short clear, 35s 3d LARD—Cwt, 37s 6d.

#### Kansas City Produce Market.

WHEAT—Receipts, 1,600 bushels; shipments, 4,710 bushels; in store, 173,599 bushels; market quiet; No. 2 \$1 00 bid; No. 3, 933/4c bid; No. 4, 89c. CORN—Receipts, 9,805 bushels; shipments, 20,554 bushels; in store, 93,429 bushels; market slow; No. 2 mixed, 273/4c bid; No. 2 white mixed 303/4c bid. OATS—No. 2, 86c bid. RYE—No. 2, 86c bid. RYE—No. 2, 63c bid. EGGS—Market weaker, 93/4 to 10c per dozen. BUTTER—Receipts larger and market weaker but prices unchanged.

Chicago Produce Market.

Chicago Produce Market.

FLOUR—Dull and nominal.

WHEAT—Fair demand and lower, No.1 spring1 12½
to 1 12¾ cash and May; 1 10 bid June; 1 05¾ July; 92
to 92½ August; No. 3 spring, 97 to 98c; rejected, 80to 84.

CORN—Unsettled, but generally lower; 36¼ c cash;
35¾ to 35½c June; 36¼ to 36¾ July; rejected, 35c.

OATS—Good demand at full prices; 29¾c cash; 29¼
June; 28c July.

RYE—Firmer; 74 to 75c.

BARLEY—Steady; 80c.

TIMOTHY—\$2 20 to 2 25.

FLAX—\$1 45.

PORK—Fair demand, and lower; \$9 80 to 9 82½ cash;
\$9 to 9 87½ June; \$10 00 bid July.

LARD—Dull and lower; \$6 77½ to 6 80 cash; \$6 80 to 6
82½ June; \$6 \$5 to 6 87½ July.

BUJK MEATS—Fair demand and lower; shoulders

\$4 15; short ribs, \$6 29; short clear, \$6 65.

#### London Market.

A cable to the Chiengo Journal says: CATTLE—Strong and active. SHEEP—Stronger; good clearance.

#### Kansas City Live Stock Market.

CATTLE.—Receipts for 48 hours, 539; shipments, 438; market quiet, with a demand chiefly for lights butchers steers; native shipping steers, 4 00 to \$4 60; butchers' steers, 83 50 to 4 60; stockers and feeders, \$3 00 to 3 75; corn fed Texans, \$2 70 to 3 25.

HOGS—Receipts for 48 hours, 326; shipments none; market firm; good, 5c higher; sales ranged 3 90 to 4 10; bulk at 4 00 to 4 10.

SHEEF—Receipts for 48 hours, 12; shipments, none; market steady; natives, 9 lots sold at 4 00.

#### Chicago Live Stock Market.

HOGS—Receipts, 15,000: shipments, 4,000: market steady, firmer for all: light bacon, 4,25 to 4 65; some common 4 15 to 4 25; mixed packing, \$4.20 to 4 40 heavy \$4.45 to 4 70.

CATTLE—Receipts, 4,500: shipments, 3,000: chunky fat cattle, steady and fair demand; others dull; plenty of fair western shipping, 3 80 to 5 00; Montanas, 4 25; butchers, 2.90 to 3 85; stockers and feeders 2 95 to 3 90.

SHEEP—Receipts, 800; shipments, 540; firm for good quality; no lower grades here; 6 20 to 6 50.

#### Denver Market.

FLOUR, GRAIN AND HAY.

HAY—Upland, 23 to 25; second bottom, 21 to 22; bottom hay, 18 to 20.

FLOUR—Colorado, 3 30 to 3 50; Graham, 3 00 to 3 25.

MEAL—Bolled corn meal, 1 60.

WHEAT—2 00 to 2 15 % cwt.

CORN—1 15 to 1 20 % cwt.

OATS—Colorado, 2 00 to 2 25; state, 1 85 to 2 60 % cwt

BARLEY—1 75 to 1 85 % cwt

FRODUCE, FOULTRY VEGETABLES.

EGGS—Per dozen, ranch 20 to 22c; state, 17 to 18c. FLOUR, GRAIN AND HAY.

PRODUCE, FOULTRY VEGETABLES.

EGGS—Per dozen, ranch 20 to 22c; state, 17 to 18c,
BUTTER—Ranch, \$\rightarrow{2}\) b, 25 to 40c; creamery, 25 to 40;
poor, 8 to 18c.
ONIONS—414 to 5c \$\rightarrow{2}\) b
POTATOES—Divide, 229 to 240 \$\rightarrow{2}\) cwt: Greeley Mortons 240; Greeley Early Rose, 250 to 275
TURKEYS—Dressed, 16 to 18c \$\rightarrow{2}\) b.
CHICKENS—Dressed, 15 to 18c \$\rightarrow{2}\) b.

#### New Advertisements.

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

#### Sweet Potato Plants. Unlimited sup-



ply. 7 Best Va-rieties, boxed and sent to your near at \$2.00 per 1,000. Special rates on large lots. Send for list E. C. CHASE, Glenwood, John son Co. Kansas.

ED.

To contract for 600 Ewes, two years old seven

A Very Valuable STOCK FARM

We have for sale a section of land, seven miles from Kinsley, Kansas, one mile from R. R. Depot, near Nettleton, which is improved by an elegant two story house with stone basement, with piazzas on three sides; a line barn 30x40 feet, two wells and wind mills, tight board corrals, with ample free range and running water. This place is in all respects very desirable for cattle or sheep. 400 head of cattle were held on the place last season, wintering well without other feed than Buffalo grass. This property is offered for \$5.00 and is a bargain for any one proposing to go into the stock business, with either sheep or cattle. Address Proprietor of KANSAS FARMER

KANSAS FARMER. **GREAT CLOSING OUT SALE** 

> OF THE "LINWOOD HERD"

Kissinger, Pike Co., Mo.,

TUESDAY, MAY 25th, 1880.

Having decided to change my business, I will sell my en-tire Herd of Short-horn Cattle—50 HEAD. 11 Bulls and bull calves, the remainder Cows and Helfers, mostly young. Some of the cows are from the importation of Pickrell & Kissinger, or 1875. The following well known families will be represented:

Young Mary, Young Phyllis. Western Lady, Lady Caroline, Belinda, Caroline, Daisy, Britannia, etc.

JAMES H. KISSINGER

WORLD Types of Female Herofsm,
Beauty, and Influence, from the
FAMOUS Earliest Ages to the Present
WOMEN with Full-page Steel Plate EnPaying Employment for Young Men. Ladies, Teachers
and others in every county. 850 to 875 per month.

Send for circulars and terms.
P. W. ZIEGLER & CO., 4 N. Sixth St., St. Louis, Mo.

## Cheese Factory For Sale Cheap

We have for sale very cheap and all in splendid condition 1 patent Coll Heater, three hundred gallon vat, Curd Drainer and Racks, Six Screw Press and Hoops, Milk weigh can and Scales, Force pump and hose, whey pump all complete with necessary fixtures and fittings. Address,
FORT SCOTT FOUNDRY,
Fort Scott, Kansas.

WILLWING ANYWATCH WEAR OUT. SOLD by Watchmakers. By mail, 30 cts. Circulars FREE.J. S. BIRCH & CO., 38 Dey St., N.Y.

### Plants, Plants.

### **Sweet Potato Plants**

Grown in the open air. Variety. EARLY RED BER. MUDAS but mostly YELLOW NANSEMOND, the standard. Also Cabbage and Tomato Plants sold at very low prices. Address,

May 1st, 1880.

J. V. CARTER, Emporia, Kas.

## AGAIN, Bartholomew&Co

Desire to call your attention to their large stock of

Cheviots, Shirtings. Jeans. Tweeds, Cottonades.

For Farmers' and artisans' wear.

BOY'S WEAR.

These goods are especially cheap, and a good assert-ment to select from. Muslins, Shirtings, Calicos. Ginghams, Tickings,

Dress Goods, Black Alpaca, Black Cashmeres, Spring Dress Goods, Lawns, Percales, White Goods, New Spring Hosiery, New Spring Gloves, New Kid Gloves, Parasols, Embroideries, Corsets, Laces and Buttons, Mens' Shirts, Mens'

Overalls, and almost everything in Ladies' and Gents' furnish-

## BARTHOLOMEW & Co's.

Cheap Cash Store. 177 Kansas Avenue,

TOPEKA - - KAS

120 Acres in Cultivation.

### George Achelis, West Chester, Pa.

Sells Crab Apple Trees and other Fruit trees; Evergreens and other ornamental Trees; Shrubs, Vines, etc. Prices reasonable. Correspondence solicited.

D. C. BRYANT, M. D., Surgeon and Oculist

Having had several years experience in an extensive private practice, and having spent the past year in the large hospitals of New York and London, making diseases of the eye and surgical diseases a special study, am prepared to treat such cases, as may come under my care, according to the BEST and most approved methods.

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#### Make Your Own Pies.

MAUD MILLER.

How well we remember, the fair days of yore, The old farm-house kitchen, the bright painted floor Those days of our childhood, where mother's dear

Illumined each corner about the old place. Those pies of our boyhood! we've not seen them

since.
The custard and pumpkin, the apple and mince, So juicy and deep, and so mammoth in size; But then our dear mother, she made her own pies,

Then pretty, fat housewife, with home bright and

Your kitchen so tidy, your household complete, What happiness beams in your fair sunny face; With snowy white apron that adds such a grace, You make your own bread, that is spongy and white, You "put up" preserves, and make cake that is dark

Would you fashion a dainty your household would Then pretty, fair housewife, pray make your own

And dear little maiden, expecting to wed,

Now don't pass this by with a toss of your head: If your husband you'd please, all the days of your

And make him the sweetest and best little wife, Pray, would you be healthy and would you be wise, Why, dear little maiden, then make your own pies.

#### Woman's Brain.—How it is Being Deadened and Destroyed by Fashion.

Dr. Richardson is one of the most eminent physicians of London, and his opinion on any subject connected with health or disease is wor thy of respect. When, therefore, he announce that the "corset deadens the mental capability of women," he furnishes a new and powerful argument against that almost universally-worn

There has been, so the most profound dress makers assure us, a wonderful progress in the construction of the corset during the present century. Sixty years ago it was modeled in shape and method of construction upon the common barrel of commerce. It consisted of a series of boards or staves, set on end around a nucleus of girl, and held together by cordage instead of hoops. This remarkable structure was in general use in New England in the days of Puritanism, and undoubtedly was closely connected with the general prevalence of austere morality in the Puritanic community. It constituted an impermeable defense against 30, 36, and 40. fires and it chilled the ardor of the worldlyminded lover, who found no delight in the hard contact of wood and coat sleeve. The New England small boy would sometimes borrow the corset of an affectionate sister prior to a personal interview with his father in the woodshed, and there is no doubt that, when worn abnormally low, it afforded efficient protection against the parental rod. It was, however, a source of great discomfort to the legitimate wearer, and the unyielding nature of the stiff, straight boards of which it was composed effectually prevented it from coming into use outside of New England, except in isolateted and bony cases.

Reports," volume 10, section 39.] The chartution of whalebone for wood. Unquestionably this was an improvement, since the whalebone was to some extent flexible. Experience showed, however, that the whalebone was liable to break, and had to be frequently renewed. In fact, the wearer was obliged to furnish herself a new set of "bones," as they were technically called, once every six months. A still graver fault was the tendency of an occasional rivaling in horror those formerly caused by railway "snake bends" became painfully common, the young husband who had succeeded in the width. passing through the period of courtship without sustaining an injury in the cheek or eye was exceptionally fortunate.

1840-42 by the steel corset, which has since is much used for evening dresses. been frequently and greatly improved. The steel "bones," when first used, sometimes broke person, but accidents of this kind have now become entirely obsolete. Of late years it is understood that the corset has been modeled so as to fit the figure, at least to some extent, and hence the ususal physiological argument against the corset has lost much of its force. There is, however, an obvious difficulty in obtaining the exact truth in this matter, since there is a great and manifest difference between the archeological and contemporary investigation. The old assertion that the pressure of the corset forced the ribs inward, or that they ultimately emerged at the back, was true only of the board and whalebone corsets, and the medern dress reformers, when they meet in convention, rarely denounce the corset, and prefer to spend their energies in attacking other articles of dress.

Dr. Richardson's assertion will have the effect to revive the war against the corset. It must be confessed that the unlearned man will fail to see the connection between the tight lacing and the action of the brain. He will say that the corset compresses only that part of the human figure known to anatomists as the re- joined by making the picet in the first loop, close to the tuft by winding the silk tightly gion between the fourth and eighteenth button,

tion of the brain, and, consequently, torpidity of the functions.

brilliant intellect has worn corsets. In support most as good as new. of this assertion, Sappho and Aspasia, George Sand and George Eliot, and other eminent women might be cited, but it is sufficient to refer to our own time and country. The long and brilliant career of Miss Susan B. Anthony has been marked by her consistent and public repudiation of the corset in every form, and Mr. Stanley Matthews states that not only has he never worn a corset, but that, in his opinion, it is an immoral and injurious affair. The example afforded by the lives of two eminent Amercans should be brought to the attention of Dr. Richardson, as affording a strong confirmation of his theory that where we find great mental power among women of whatever age we also find a total absence of corsets.—New York Times

#### Terms and Materials Used in Needle-Work.

Tabaret .- A stout, satin-striped silk used for furniture.

Tabbinet.-A name for poplin of rich char cter, the warp of silk, weft of wool. So called because the surface is "tabbled" or watered. Sometimes a pattern is introduced into it. It is chiefly used for window curtains and other up holstery purposes.

Tabby.-A coarse kind of taffeta, thick, glossy, and watered. In silk this kind of material would be called "moire."

Tacking .- (From the Italian Attacare) .- A term used in needlework to designate small stitches taken through two pieces of material at wide and regular intervals. It is most securely effected by working from left to right. Designed to keep the two portions of stuff in place preparatory to their being permanently sewn together.

Tailor's Twist.-A coarse silk thread made of several together, wound on reels, of two ounces each. The numbers used by tailors run from one to eight. There are small reels containing a single thread of twelve yards, equivalent to one yard of twelve threads. By this plan dealers can keep a larger supply of shades at a smaller cost.

Tamis.-A worsted cloth, expressly made for straining sauces, and sold at oil shops.

Cambour Cotton, made up in skeins, is sold in half bundles of five pound each, and used by tailors for basting. It is to be had in balls, also. The numbers are 12, 14, 16, 18, 20, 24,

Tambours.—Sprigged and spotted needlework muslins, of widths from 27 inches to 36 inches, and in lengths of 12 yards. They are semitransparent. The needle has a small hook. dollars in value and lost years of his time in Tambours are sometimes embroidered with gold thread.

Tambour Stitch (otherwise known as "Chain Stitch.")—The work executed in this stitch is a very old style of embroidery, of which fine specimens are to be seen. The modern method of working differs from the ancient; the latter style was to draw the thread through the material from the wrong side by means of a hook, and so looping it.

To the wooden corset succeeded the whale- made of worsted; yet, unlike the latter, they bright light. Tammies.-These stuffs, like buntings, are bone corset, which was introduced into the are plain, highly glazed, and chiefly used for country in the year 1831. [See "Smithsonian upholstery. They are a kind of Scotch camlet, and are otherwise called "durants." They are acteristic feature of this corset was the substi- twilled, with single warps, and are usually coarser than twilled bombazets. Their width varies from 12 inches to 36 inches, and are mostly used for women's petticoats.

Tapestry.-Embroidery with colored worsteds, silks, and sometimes enriched with gold thread; anciently worked by hand with a needle, and in later times by the loom.

Tapestry Stitch.-The ancient "Opus plumarium," otherwise called "feather stitch." bone to work upward and outward. Accidents They lie lengthwise close together, and overlap one another, two threads of the material being crossed in the length of the stuff; and one in

Tarlatan .- A thin, gauze-like muslin, much stiffened; so called from Tarare, in France, the The whalebone corset was succeeded in about stiffened, and may be had in various colors. It chief center of the manufacture. It is much

Tartarium .-- A fine cloth made in Tartary, and is mentioned in the wardrobe accounts of and pierced the woman in vital parts of her Edward III, and often named amongst the expenses of tournaments.

Tatting.-This work (otherwise called fricolite) is done with fine crochet cotton, and by means of a small shuttle, and a strong pin, attached by a chain to a ring, which is worn on the left thumb, the shuttle being held in the right hand. The shuttle is passed round the extended fingers of the left hand, and brought again between the thumb and finger of the thumb and first finger, the shuttle slipped an- they would save the feathers of hens, roosters, der the thread between the first and second fin- peafowls, etc., and form them into feather dustgers, drawn out quickly, being kept in a hori- ers or flowers for winter bouquets. For the latzontal line with the left hand. While the ter, begin by making a card box with many dithread is held stretched by the shuttle, the sec- visions; then with sharp scissors trim all the ond finger of the left hand should let the loop under it slip, thus securing the cotton; and oval leaf, leaving only a short stem. Prepare a when a number of stitches are finished, they good many in this way, carefully cutting away should be drawn together closely and so form a a part of the midrib to render it flexible. loop, which latter are united one to the other by Have some fine wire cut into short pieces and the little picots introduced to form the purl- some strands of floss silk, and, taking a piece of edge, round each loop. They are made by wire, attach firmly to one end several stiff fibres twisting the cotton round the pin, and holding or a few bits of down; next take one of the it while forming a stitch. These loops are leaves, and, bending it gently outward, fix it where the connection should be made, and on round the wire; repeat until you have six or

factorily into constant use than that which enables one to skillfully eke out scant materials lite blue flowers, and the different shades of gray It would be easy to show that no woman of and remodel dilapidated garments that are al-

#### Keeping the Teeth Clean.

Mr. G. A. Mills gives some sensible advice about cleaning the teeth. While there is, he says, a general use of tooth-brushes by the people, there is, also, not uncommonly an abuse of them for want of proper instruction. It is getting to be understood by both dentists and patients more than formerly, that a crosswise brushing is not wise, but that the upper teeth should be brushed downward, and the lower teeth upward. It is a common mistake to brush thoroughly the cheek and posterior surfaces of the lower front teeth. "I am sure," said Mr. Mills, "that nothing like an adequate amount of care is given to this service. It cannot be too strongly impressed on the minds of as early as possible. Straight brushes are utterly impracticable on the surfaces to which I have referred as the ones most neglected. Curved brushes with a tuft end, bud-shaped or convexed are the best. There are several efficient forms."

The faithful use of floss silk between the teeth ought to be earnestly recommended; also the quill toothpick. The wood toothpicks so generally furnished at public eating places are source of much evil to the soft tissues between the teeth. All kinds of metallic toothpicks are objectionable, though it is the practice of some dentists to commend them to their patients. The value of a decided polished surface of the tooth becomes very apparent to those who have had the operation performed; the facility with which such teeth can be kept clean is evident, and, although this condition may have been secured at considerable expense, yet it is an investment that will pay a good rate of interest. Few dentists have much idea of the beautiful polish that a human tooth will take. Many teeth are capable of a great improvement in this direction, which are now a decided detriment to what might otherwise be a pleasing face. The general idea among the people is that interfering with the surface of the teeth destroys the enamel, but this is a popular error.

#### Eye Sight.

Milton's blindness was the result of overwork nd dyspepsia.

One of the most eminent American divines having been for some time compelled to forego the pleasure of reading, has spent thousands of consequence of getting up several hours before day and studying by artificial light. His eyes never got well.

Multitudes of men and women have made their eyes weak for life by the too free use of the eye sight. In view of these things, it is well to observe the following rules in the use of the eyes: Avoid all sudden changes between light and

Never begin to read, or write, or sew for several minutes after coming from darkness to a

Never read by twilight, or moonlight, or of a very cloudy day.

Never read or sew directly in front of the light, or window or door.

It is best to have the light fall from above, obliquely over the left shoulder. Never sleep so that, on the first waking, the

eyes shall open on the light of a window. Do not use the eye sight by light so scant that it requires an effort to discriminate. Too much light creates a glare, and pains and confuses the sight. The moment you are sensible of an effort to distinguish that moment cease and take a walk or ride.

As the sky is blue and the earth green, it would seem that the ceiling should be of a bluish tinge, and the carpet green, and the walls of some mellow tint.

The moment you are tempted to rub the eyes that moment cease using them.

If the eyelids are glued together on waking up, do not forcibly open them, but apply the saliva with the finger-it is the speediest dilutent in the world-then wash your face and eyes in warm water .- Exchange.

This has been going round for about ten years, and its ownership, we guess, is lost; but it is good enough to go on indefinitely .- Phrenological Journal.

#### Feather Work.

superfluous parts, and shape the feather into an region, it cannot be effected by pressure applied the process of the content of t white roses by arranging several rows of netals

common hen wilt surprise those who have not made a study of the art of feather flower making. For those who can see no beauty in quiet shades there are the "family dyes," which will color feathers prettily, by first wetting well in hot water, then dipping into a solution of red or blue, with the addition of a small bit of

alum to set the color. The plumage of birds of all kinds (and of the wild duck in particular) will vary your collection, and form objects worthy of admiration and study for all .- Floral Cabinet.

#### A Pearl Necklace.

The Empress Eugenie's famous pearl necklace is now the property of one of the richest women in Europe, Countess Henckel. The Empress had the pearls sold in London. One the guardians of children that the practice of of her ladies, accompanied by two friends of brushing the teeth thoroughly should be begun the imperial widow, carried them to an English jeweller, who bought them and disposed of them to the Countess Henckel for \$72,000. This lady had some of the pearls less beautiful than the others removed, and added two other rows one of which came from the jewels sold by the Queen of Naples, the other from the necklace of the Virgin of Atocha, sold by a great Spanish personage. At present the suite of peals belonging to the Countess, ear rings and brooch included, is worth \$160,000 or \$180,-000, and is said to be the finest set of pearls in the world .- London Truth.

> CRACKERS FOR INVALIDS .- One quart of flour, two eggs, one tablespoonful of sugar. The eggs and sugar must be beaten well together. One large spoonful of butter and lard mixed, to be rubbed well into the flour. Mix all together, and beat long and well. Roll out as thin as a wafer.

BERKSHIRE RUSKS.-One cup sweet milk, one cup yeast, one cup sugar, one cup flour; set over night; in the morning add one-half cup sugar, one-half cup butter, rubbed together, two eggs, reserving white of one, beaten to a froth with little sugar, to spread over the top.

LINCOLN CAKE. Two eggs, two cups sugar one-half cup butter, one cup milk, one-half teaspoonful soda, one teaspoonful cream tartar, three cups flour, flavor.

#### Advertisements.

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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and fruits for the market. See our catalogue
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### Notice to Sheep Men.

Any persons having sheep to put out on shares, or any other conditions, are requested to correspond with the undersigned, who has had much experience in the care of sheep. Sheep must be healthy. Range dry and rolling, supply of spring water ample, and rock fences sufficient to protect against wolves and water. Satisfaction guaranteed. Address. ranteed. Address JOHN HOLAHAN, Waverly, Coffey Co., Kas

#### FOR SALE.

Three choice Jersey Bull Calves, age from one to eight months and descendants of imp. Gyrene second, prize winner at Centennial and grand sons of the celebrated Mulberry 2d, whose 3 year old butter of the unrivaled, viz., 14 80 in seven days, from testimony of J. M. Harden, viz., 16 year, or the corded in herd book and transferred to purchaser. For full description and pedigree call on or address, W.M. M. SNYDER, Allendale Breeding Farm, near Iola, Allen County, Kas.

## THE Weekly Capital

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J. K. HUDSON EDITOR AND PROPRIETOR

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#### Special Announcement.

During March, 1880, the Capitat will be enlarged to 48-column paper. Subscriptions taken at any time Ladies who live in the country and raise poultry would find it a source of amusement if they would save the feathers of here received.

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50 Pin-a-4, Chromo, Lily, Lace, Marble, etc., Cards, in case, 10c. GLOBE CARD Co., Northford, Ct. 50 Perfumed cards, best assortment ever offered, 10c. Agts Outfit, 19c. CONN CARD Co., Northford, &t

52 Gold, crystal, lace, perfumed & chromo cards, name in gold&jet 10c Clinton Bros, Clintonville Ct 50 Chromo, Glass. Scroll, Wreath and Lace cards 10c Try us. CHROMO CARD CO. Northford Ct,

18 Elite, Gold Bow, Bevel Edge cards 25c. or 20 Chinese Chromos, 10c. J B HUSTED, Nassau, N Y

50 Motto, Gold, Floral, Scroll, Snowflake cards, 10cts, Agts Samples, 19c. Stevens Bros, Northford, Ct;

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

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New and very Important Discovery. Deodorizer, Disenfectant, Antiseptic, Insecticide,

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### THE STRAY LIST.

Strays for the week ending May 5.

Bourbon County—L. B. Welch, Clerk.

MARE—Taken up April 5, 1880, by Stephen D Newell, of Drywood tp, one gray mare supposed to be four years old, about 16 hands high, valued at 890.

MULE—Also one bay mare mule 2 years old, and valued at 830.

at \$20. MULE—Also, one black horse mule two years old, valued at \$25, MULE—Also, one black horse mule two years old, valued at \$25. MULE—Also, one mare mule two years old, no marks or brands perceivable, valued at \$36.

Chautauqua County--C, M. Knapp, Clerk,
PONY--Taken up by Gotlieb R. Ahrburg, Center tp, Mar 22, 1889, one claybank horse pony, black mans and tall,
white spot on left side, black on fore knees, black on hind fetterlocks and upwards, slod on fore feet, white stripe in forehead, ten years old, valued at 220.

Cowley county-J. S. Hunt, clerk. PONY—Taken up by Thomas Butler, April 7, 1880, on light bay mare pony, about eight years old, left hock enlar ged, spotted on both sides, about 13% hands high, no apprais ment given.

Elk county.—Geo. Thompson, clerk.

PONY—Taken up April 3, 1886, by T C Dunn, Longton tp,
one poay mare, 14 hands high, from grey, saiddle and harness
marks, branded on left hip HI, valued at \$25.

Russell county-C. M. Harshbarger, clerk. MULE—Taken up April 12, 1880, by Joseph S Ulsh, Russell tp, one dark roan horse mule, blind in left eye, has sores on front legs as if from wearing hobbles, about feur years old, valued at \$60.

MULE—Also, by the same, one chestnut bay horse mule, four years old, valued at \$60.

Strays for the week ending April, 28.

Anderson county—Thos. W. Foster, clerk.
MARE—Taken up by Peter Ecord, Reeder tp. March 25,
180, one from grey mare, left hind foot white, about 15
hands high and 5 years old.

Nemaha County-Joshua Mitchell, clerk. COLT—Taken up by Albert Becker, Neuchatel 1p, January 28, 1880, one dark buy horse colt, one year old past, medium size, no brands, valued at 825.

MARE—Taken up by O M Gage, Capirnia tp, Nov 20, 1878, cne dark bay mare, two years old, medium size, no brands, valued at 850.

I. A. HEDGES, Pres't Cane Grewers' Association, Sr. Louis, Mo

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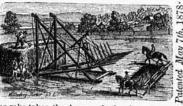
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#### farm Letters.

SILVERTON, Stafford Co., April 20,-While reading in the FARMER, communications from all over our state, from old and experienced farmers as well as amateurs, and all of them seem to be of interest, useful and instructive, I thought perhaps I might say something that would be of interest to some one.

We have a variety of soil here-hard, black land, light, sandy land, and yellow, clay land. The crops on light, sandy soil are looking better than on any other soil. It is very dry here, having had no rain since November. Farmers are busy planting corn.

There was quite a large area of fall wheat sown last fall. The dry and cold weather have done considerable damage to it, but I think if Rye is looking well but it is beginning to joint. The latter seems to need rain more than wheat. Oats are up and looking as well as could be expected. Grass is beginning to look a little green, and cattle are looking very well.

I saw a statement in the FARMER that the people in some of the counties were in a starying condition. We, here in Stafford county, are not likely to starve so long as there is work to be had on railroads. Nearly every one in these parts has been off on railroads, or are making calculations to go on as soon as they get their corn planted.

Many of the farmers are in doubt as to whether they will have any corn this season, and are talking of planting largely of Egyptian corn. As for me, I will plant all the seed I can get, probably fifteen acres. Some will put in as the rub. high as fifty acres. I think the Egyptian or In my Rice corn will be one of our staples in future, as it is a sure crop.

We have been having some very high winds. which have done much damage to wheat and timber, especially to cuttings just set out. I put out six acres this spring, and the soil blew off, so that one-half of the cuttings are nowhere to be found.

Will some one tell me, through the FARMER, where I can get a few artichokes and Spanish chufas, and what will be the cost per pound?

I think that E. A. Peck is rather hard on a certain class of individuals, besides wishing the price of the "Old Reliable" FARMER to be four dollars a year. It would then be so high that the poor Kansan could not get a chance te even look at its pages, and we could not keep B. H. G. house without it.

H. S. H. Downs, Topeka, will furnish chufas for thirty-five cents per pound.

BANVILLE, Comanche Co., April 19 .- Yesterday can claim to be the windiest day of the season. It commenced in the morning with a brisk gale from the southwest, and by noon it blew a perfect hurricane, veering round to the northwest towards evening and growing colder, winding up last night with a heavy freeze. The weather still remains very dry in western and southwestern Kansas. Scarcely a drop of rain since last fall, and the prospects for farming look very gloomy at present.

The spring "round-up" has commenced in this county, and cattle on the range are in better condition than for several years past at this

Many farmers are turning their attention to sheep and cattle, which promise a better return for the capital and labor expended than farming

My advertisement of Mexican onion seed, in the KANSAS FARMER, brought such an unexpected number of orders, that the stock I had for sale and what I had reserved for my own use, was soon exhausted, but I have now received a large supply of fresh seed, and can fill all orders as fast as received. I have received a good many inquiries by mail as to how late it will do to sow the Mexican onion seed. I will answer, through the FARMER, by saying that the stallions have been brought in from Illinois this spring. Pure blood Merinos and Cotswold sheep are ours to select from in this county. last year I sowed on the 10th of May, and raised good onions, but I would advise sowing as early as possible and not later than the middle of May.

I have also received a number of inquiries as to the practicability of raising water by means of windmills, for the purposes of irrigation. I will answer by saying that my experience in irrigating leads me to believe that the windmills I have seen in use in this country would be of no service, and would not justify the expense for the purposes of irrigation; but I will answer more fully in a future article. An experiment is being made on the prairies of Edwards county, by a Chicago capitalist, with a steam pump and windmill both, for the purpose of irrigating, and though I am convinced they will prove a failure, I will give the results to the readers of the FARMER when the experiment has been fully tested.

Brother Hey says, in his article of April 14th, on artificial rain: "Mr. Leggett gives a description of irrigation which looks very well on paper, but I think would not pan out with success here. Where irrigation is practiced with profit it has got to be somewhat level. I I don't see where he is going to find water that will run from the creeks up into a rolling prairie that is ten to forty feet higher than the creek, and especially where the creeks are (some of them) dry for a great part of the year." Now Mr. Hey either did not read what little I wrote on the subject, or else did not read it understandingly. I did not propose a cure-all for the ills that Kansas is heir to, but in my first letter stated that those who were favorably located on streams of running water, could use irrigation for the purposes of a garden, orchard, or root crops, and in my last letter I stated that the requisites for successful irrigating were a never-failing stream of water

and level enough to prevent any great washing of the soil. If Mr. Hey ever contemplated going to any expense to irrigate from a stream that has no water in it, I can only give him Punch's advice to young folks about to marry:
"Don't, don't do it." But if his creek has water in it with the average fall of Kansas streams, and his land lying only ten to forty feet above the level of the stream, the thing can be did," in fact the ten feet will be a great advantage as it will place him beyond the reach of the freshets so disastrous along the streams after a heavy rain. Has it never ocourred to Mr. Hey that by going up the stream to a point a little higher than the land desired to be irrigated, and taking out a ditch and saving the fall of the creek, the water can be conveyed on the land even if it be ten or forty feet above the stream where the land lies? If Mr. we get rain soon that there will be half a crop. Hey would pay me a visit, I could, with the aid of a shovel and hoe, and the water running on my land as it now does-fifteen feet above the level of the creek, make it look even better to him on the ground than he thinks it does on

It is useless to tell farmers that they must break ground and plant trees when the ground is baked as hard as a brick and no rain has fallen for nearly eight months.

Again he says the horticultural part of the farm is neglected in the hurry to sow and reap the wheat crop. God knows it will not be neglected on that account in this section of country, for alas! there is no wheat crop to reap. It is easy to say the farmer should get the ground in right condition to plant an orchard; that is what they all want to do, but how to do it, that's

In my next I will send cash to advance my subscription to the Kansas Farmer, and I consider it the best investment I can make, and if all my brother farmers would do the same, I have no doubt it would be hundreds of dollars in their pockets and of incalculable benefit to the state at large. I send, as you request, the names of some farmers and stockmen in this vicinity, and hope the specimen copies you propose to send may induce them to become subcribers, and thereby benefit the FARMER and THOMAS LEGGETT.

KECHI TOWNSHIP, Sodgwick Co., April 17 .-Thanks to Mr. Colvin for information to sheep and wool growers. Unable to get what seems to me a fair offer for my product from Wichita wool buyers, I shall write to "Kinse, Jones & Co." for prices. But from my own experience of eleven years handling sheep in this state and Illinois, I think that early shorn sheep will thrive better and sheer annually a little more wool than when shorn late. If sheep are shorn early they, of course, for a week or so may require more protection, but at the same time nature brings every power into exercise to supply the demand, and while the sheep may gain nothing in weight of carcass, the covering of wool is soon complete and sufficient protection.

I am much interested in the various opinions expressed of the catalpa. Have read Barney's pamphlet and am yet in doubt as to whether we have the hardy or common kind. His description of the varieties make them so similar that we will have to wait for older trees ere we may know which is which. I have about one may know which is which. I have about one thousand, covering an acre of ground. They were planted in forest shape from seed-bed last spring. The seedlings made a growth of about 3½ feet. This growth was cut off, worked up into cuttings, and these were stuck into good, moist ground. One-half of them grew, made good roots, and about 2½ feet of top. The topped plants I set out last spring, made a new growth of six feet on an average.

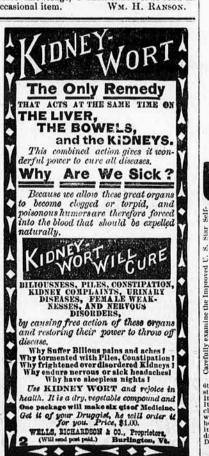
Wind, dust and drouth are the controlling elements with us this spring. Growing wheat is

ements with us this spring. Growing wheat is suffering much, and some of our furmers are wearing long faces. Most of the corn is planted. Oats are coming up scattering.

Stock looks well, and farmers are giving it

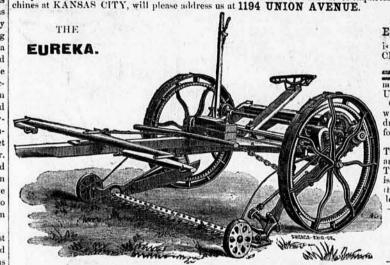
Mr. Editor, hoping in some way to show our appreciation of your efforts to disseminate valuable knowledge, I shall endeavor to send an occasional item.

WM. H. RANSON.



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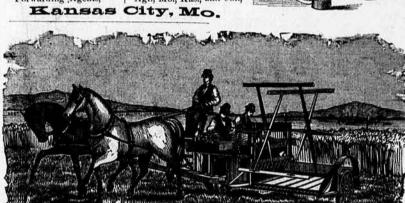
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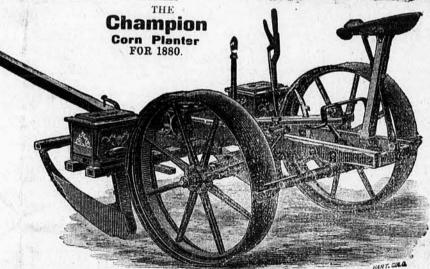
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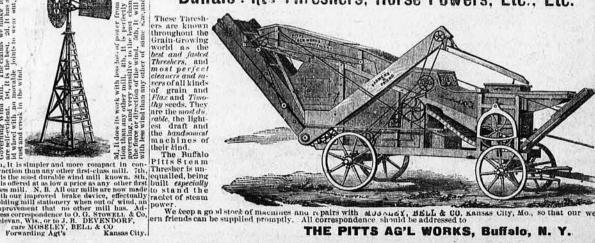
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