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THE KANSAS FARMER.

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More About Corn.

If you want to raise good corn you must have good seed. Many farmers, year after year, run around through their neighborhoods hunting seed corn. For several years I have made it a practice to select my seed corn in the fall. My plan is this: When picking corn I put a half bushel in the end of the wagon, and whenever I get an ear that suits me I drop it into the half bushel. I have also known men to keep a box or a barrel in their crib when feeding out their corn, and when they came across a good ear drop it in the barrel. This is a good plan. In the spring I take a grain at random from thirty or forty ears and plant them in a box; when they come up I have a pretty accurate idea of how much will grow.

It is within the memory of man when the oldest horse on the farm—blind, if possible—was hitched to a plow, and the farmer, with much squinting and sighting, and geeing and hawing, "furrowed out" the corn rows, generally getting them so crooked

"Winding in and winding out,
Leaving the people all in doubt,
Whether the man who made the track,
Was going south or coming back."

After him came the dropper, a small, freckle-faced boy, invariably lazy—there never lived the boy that did not hate to drop corn—while after him came the "kiverer," who was careful to keep the clods off of the corn and to keep his eyes open for ground squirrels.

Now when the farmer has twenty acres ready to plant he hitches on his new two-horse check-row corn-planter and puts it in in one day. Surely the world moves, and farmers do not occupy the back seats by any means.

I believe that as a general thing we plant too much in the hill. I think two good stalks enough, while the general practice is to have from three to six. If we plant corn three feet ten inches apart each way we have nearly three thousand hills to the acre. At two stalks to the hill this would give us six thousand stalks to the acre, and if each stalk bore one good ear we would have six thousand ears, which I have found would make from ninety to one hundred bushels of corn. There was a time when I thought four stalks to the hill not too much, but now I know two to be better. If you put your ground in the order it should be, and secure good seed, it will not be hard to get good stalks in every hill. Or to make assurance doubly sure you might plant more and thin it out afterwards.

In cultivating corn we have one object in view, viz: to increase the crop. The effects of cultivating are several—root-pruning, pulverizing the soil, and bringing light and air in closer contact with the roots of the plants.

The roots of plants absorb plant food in a soluble state from the soil. The roots of some plants penetrate to a considerable depth while others remain near the surface like those of corn. It is principally through the young and tender roots that this plant food is absorbed; hence, anything that increases those roots will increase the amount of plant food absorbed, and hence the crop. In no way can the number of these roots be more quickly increased than by cultivation. If a root be cut or broken several smaller roots will push out at the broken extremity and soon be equal to the original root in size and power of extracting nutriment from the soil. If these second set of roots be likewise cut they will send out a number of new ones from each, largely increasing the absorbing roots of the plant. This is one of the great objects accomplished by cultivating corn through the growing season. Of course the flow of sap is checked and the growth of the plant retarded for a time after the root pruning, but the result is that the sap flows more deliberately through the plant and is more thoroughly elaborated.

Plant food to be absorbed by the corn or any other plant must be in a state of solution. Now by cultivating we fine the soil and the power we expend lessens the force of cohesion between the particles of the soil. Anything that lessens cohesion hastens solution, hence cultivating hastens the reduction of plant food to a soluble state.

But one of the most important earthy constituents of plants and forming more than one-half of clay and from 70 to 90 per cent. of sandy soils, is silica. Silicates in one form or another form a very large proportion of all soils. But

they are not soluble in water. Yet these compounds may be broken up, their bases forced and made soluble and available, by contact with the air. The metallic bases of the alkalies of these compounds will be changed to oxide by the oxygen and ozone of the air, and the organic mass will be decomposed and active organic alkalies and acids will be developed. Carbonic acid and nitric acids will take the bases from the silicic acid and hold it in a soluble form. All this will be accomplished by cultivation.

But by cultivating your corn crop you bring the sun and air in closer contact with the roots. Corn requires heat, being a tropical plant, hence anything that will bring the rays of the sun to bear more strongly on the plant will be beneficial. Also corn derives a large amount of its food from the air, therefore anything that brings the necessary gases to the roots will also prove of benefit. It should not be forgotten that 94 per cent. of the substance of plants is derived from the air, and that only the ash remaining after burning is derived from the ground.

By cultivating you will also keep weeds from growing and appropriating the plant food required by the corn.

Cultivators (two-horse) and double-diamonds are now used almost exclusively in the cultivation of corn. I raise large crops of this very important cereal, and find that one year with another I get the best results by plowing the first time with diamonds, the next three times with cultivators, and the last time throw the dirt to the corn with the diamonds.

JOHN M. STAHL.

The Arrangement of the Discharge End of Under-Drains.

In a former paper on under-draining, contributed to the FARMER, I mentioned the importance of properly constructing them at their discharge end, and promised to describe the best system known to me.

The importance of the arrangement of that portion of drains with special care, grows out of the liability of displacement of the draining material at the mouth by the tramping of cattle, the washing away of the bank of the stream, or open drain into which under-drains discharge, and in some instances to prevent silt from settling back into the mouths of drains, by the manes into which they discharge becoming clogged by the caving of banks, etc.

If the discharge of an under-drain becomes closed or clogged, and the necessary construction of silt-pits, which I recommended, has been neglected, sediment will accumulate in that portion of the drain and set the water back in the drain and cause it to break out on the surface, and may thus seriously impair the efficiency of the drainage.

In the use of pit-drainage, which I described, the casualties above enumerated never occur, for the discharges of the drains being into covered wells, they are thoroughly protected from the causes of derangement described. Proper attention to the stream or open ditch into which under-drains discharge, by which to prevent the causes of stoppage of drains described, is of the greatest importance, but no degree of care in the care of the open drains will obviate the necessity for a proper arrangement of the discharge ends of the drains.

Whatever material may be used in the construction of under-drains, the necessity for thoroughly protecting their outlets is equally essential in all, for the same causes are operative alike on all under-drains.

I have found that the use of a joint of cast-iron pipe of proper size, for the discharge of a drain into a stream, or open ditch, very satisfactory.

When the drain is constructed of gravel, it is necessary to append to the upper end of said joint of cast-iron pipe, a strainer of galvanized sheet-iron pipe, which should be closed at the receiving end with the same material, and the cap of the end of the pipe and all portions of it not required to slip over the cast-iron pipe, should be punched full of holes about one-eighth of an inch across, which perforated pipe should be, the perforated portion, some two feet in length, and it should be bedded in the gravel used as draining material. In the use of tile for the drains, a tile may be inserted into the receiving end of the joint of cast-iron pipe.

In the use of rubble stone for the drain, the iron pipe may be bedded in them, the same as described in the use of gravel.

In all cases a cap of sheet-iron in the form of a cup or round can, should be placed on the discharge end of said cast-iron pipes, and the closed end of it should be perforated for the discharge of water. The object of this screen is

to exclude vermin from the drain. Without this precaution is used, mice will build nests in the under-drain, and sediment will clog against these obstructions and destroy the drain. In all cases, the discharge pipe should be laid so that it will discharge obliquely down stream, as sediment is not so liable to accumulate in the pipe in times of high water, when thus laid.

As mentioned in a former paper on draining, it is desirable that the stream or open drain into which under-drains are to discharge, should be deeper than the drains.

Deep, thorough tillage in conjunction with proper surface and under-draining, will do more to augment rainfall on a district proverbial for drouths, than can be accomplished by tree-planting, or any other process known to the writer.

J. WILKINSON.

Brooklyn, N. Y.

More About Color Breeding.

I do not see that there is any need of making such ado about color. It seems to be a mere matter of fancy. If there is such a great difference as Mr. Stuart claims why does he not prove it? And as to the original color it matters but little whether they were reds or roans. Some writers claim that they were reds and white, and the roans are a result of crossing. One thing sure, we know that the third Duchess of Thorndale was a dark red; Hubback was a red and white, and even a great many pedigrees run direct to "James Brown's red bull."

There has been a great deal said about the origin of short-horns, but there is nothing definite as to where they sprang from, but we know that T. H. Collings first brought them into notice as it is stated, "That [while] Bakwell was experimenting with the Long-horns, it occurred to the Collings that the Short-horns were more susceptible of improvement." This was about the time of the Revolutionary war.

Hubback was purchased in 1783, (I gave a short history of the early breeding of short-horns in the FARMER last February. Those interested can look it up,) and by the year 1817 they attracted the attention of some of the people of the United States to such an extent that they imported some of them under the name of seventeens. This was before there was any herd book, but finding they rapidly increased and wishing to keep a record of them for reference, Mr. Coates started his herd book.

Mr. Stuart misrepresents me in saying, "That in obedience to a groundless prejudice, short-horn breeders are passing superior roans and using inferior dark red bulls in their herds."

Now, what did I say? Simply, "That this color mania was causing some to use inferior animals," and he says, "And there was a certain noted breeder, a Mr. Jacob, who bred to color. He reversed Mr. W's plan and bred for roans leaving the solid colors to Laban; and not feeling quite safe about the matter, like a Kansas debtor got up one morning six or seven hours before day and emigrated to Colorado."

Now I do not know what the Kansas debtor has to do with breeding cattle, but I do know he misrepresents Jacob, for you will find in the 32d verse of the 30th chapter of Genesis, that Jacob took the speckled and spotted cattle and Laban got the brown. Better be a little more particular, Mr. Stuart. Then again we were talking about short-horn cattle, which must be a red, red and white, roan or white, instead of speckled, spotted, or brown cattle. He says Mr. Waltmire advises me to breed for real merit without regard to color. Sound advice! It is unfortunate he does not practice what he preaches." Here is another one of his suppositions. My principle is to breed to a red animal unless I can get a roan that is better.

Last fall I made arrangements to breed to Mr. Rollings' (of Manhattan) three year old roan bull sired by Lord Bates' 2d dam imp. Delight, provided I did not purchase a new one of my own, which I since did, being Lambertine 16056 the old bull of Dr. W. W. H. Cundiff, of Pleasant Hill, Mo. He was kept in Dr. Cundiff's herd for six years. He is a large, massive animal, having weighed 3,000 pounds. Here you will find the much sought for marbled meat.

In a former article he says, "I wonder if Mr. Shelf's is as dishonest as Mr. Waltmire and the rest." Then again he claims that I am honest to confess that I am breeding red cattle; and again says; when a man chooses a dark red short-horn rather than a yellow red or roan he is either ignorant of what he wants or is dishonest. If the roans are so superior why does he not prove it? and why are the roans so much below par, as we all know the red cattle are all the go now.

And still in another article he says he used a thorough bred bull that did not give as good satisfaction as a grade bull he used afterwards.

It seems evident that somebody has palmed off a red bull for a thorough bred short-horn, consequently he uses no more red bulls, but roans instead. Moral—better buy of reliable men hereafter. But why be running down the red colored short-horns? As far as horns are concerned, people are beginning to learn that these cow horned bulls get but few show animals.

I think Mr. Stuart has virtually admitted there is not so much in color after all when he says he supposes he is not very interesting to the majority of the readers. Just what I think, but perhaps I can give a few useful hints by replying. If I can get the people to see that they can make a half blood steer weigh two or three hundred pounds more with the same expense, or a fifteen-sixteenths weigh six or seven hundred pounds more, and the last nearly as much again, I have accomplished my object, and I have never found a large feeder to make any difference in regard to color when buying his steer.

M. WALTMIRE.

Carbondale, Kas.

A Trip Through Kansas to the Rocky Mountains.

Your correspondent started from this place on April 28th, overlaid to Colorado, striking the A., T. & S. F. railroad in Osage county, Kansas, and following it up the Arkansas river all the way to Pueblo, Colorado, a distance of about five hundred miles.

Crops of all kinds in Miami county were looking well when leaving home and continued to look so all along as far as Great Bend, but although not as good as nearer home, it being much drier as we traveled farther west. From Pawnee county through Edwards, Ford, Foote, Sequah, Kearney, Hamilton, and all through Colorado, it was very dry. There had been no rain since last November to amount to anything, so we were told by those who live there. It certainly looked as though the people in those counties were entirely destitute of subsistence. A good many were leaving in search of work, as there was no show whatever to raise a crop, and they did not have any surplus food on hand.

On my return home I came from Denver, Colorado, down the K. P. railroad, and found the same state of affairs to exist on the route through four or five counties, and I have no doubt such is the case all through western Kansas, from one end to the other, north and south. I presume I had as good a chance to learn these facts as any other person who ever traveled, as my business was to work up the botany of the country in which I traveled. I found a great many new plants in the Rocky Mountains.

It is my intention to publish a practical and analytical flora for the use of schools, which will describe all plants found west of the Mississippi river. I am also examining the medical properties of new plants.

My advice to those who are living in eastern Kansas is to remain there and be contented, where everything can be raised and plenty of it.

DR. J. H. OYSTER.

Paola, Kansas, July 5th.

South Dickinson County Items.

Hurrah for grand old Dickinson! is the way most all of the farmers, and in fact all others, feel like shouting. It was getting pretty dry, and corn was beginning to suffer for rain, harvest was nearly finished, and then came some glorious showers that set the corn "booming." The ground is wet down pretty well. Corn ground is wet down deeper than the stubble ground. Many have commenced plowing for winter wheat, and we should like a little more rain to make stubble plow real nice. We think fall as large an acreage of wheat will be sown next fall as last. It is intimated by some that the wheat crop of this year will be about 12½ bushels per acre.

Many fields of corn are just setting, and the rain came in the "nick of time" to make it so thick. The chinch bugs are making sad havoc in some places; starting in and taking as they go, fields of corn and oats. It is hoped that the past showers will start the corn and check the bugs so that a pretty fair crop will be realized.

Early potatoes are pretty scarce, owing to its being so dry. They are selling in Abilene at 60c per peck, and other garden truck in proportion. We are being visited by the long green-worm heretofore mentioned. They seem to have a great relish for cabbage, sweet potatoes, young corn, etc. They have made bad work with some of the gardens.

A few are sowing buckwheat with the view of experiencing the pleasure of eating "slap-

jacks," and the "back-easters" are respectfully requested to send on their "maple lasses."

Some of the people from the "dry west" are coming into the county for work, which they readily find, so far. One man from Ellis county reports that as many as 1,500 had left that part of the country, and they were leaving all the time.

Wheat is now selling at 60c; corn, 20c to 25c; oats, 20c; eggs, 12½c; butter, 15c.

To the readers of the FARMER we wish to say, in voting for governor this fall, your interests will be represented in Hon. T. C. Henry, of our county. Owning farms and being interested in farming, he will be a representative of the agricultural interests of Kansas.

L. L. MERRIFIELD.

Abilene, Kansas.

The Chester Whites.

Mr. Coburn has given the Berkshires a boom, and Mr. Hale the Poland Chinas. I think it is my turn to add a word in behalf of my favorite hogs, the Chester Whites. I claim that they are the largest breed of hogs, have the most quiet disposition—for they are natural pets from the start, and after they are fed are not running about taking off the fat, but lie down and take on fat. They have a good, square form, broad, straight backs, heavy hams and shoulders, deep, wide chests, with short head and legs, making them a hog that is ready for market at any time, and if the market does not suit when they are young, you can keep them over and still be making money on them.

W. W. W.

Weather Report for June, 1880.

(From observations taken at Lawrence, by Prof. F. H. Snow, of the Kansas State University.)

During this month the weather was perfect. There was no extreme heat and there were no violent storms. Abundant rains during the first and last quarters of the month kept the corn fields in prime condition, while the absence of rain during the second and third quarters secured a safe harvest for the large wheat crop of this section.

Mean temperature 73.57 deg., which is 3.11 deg. below the average June temperature of the twelve preceding years. The highest temperature was 90 deg., on the 23d; the lowest was 50.5 deg., on the 2d; giving a range of 45.5 deg. mean at 7 a. m., 69.1 deg; at 2 p. m., 83.47 at 9 p. m., 70.9 deg. The mercury reached 90 deg. on 8 days.

Rainfall 4.10 inches, which is .96 inch below the June average. Rain fell on 9 days. There were 5 thunder showers. The entire rainfall for the 6 months of 1880 now completed has been 14.52 inches, which is 2.62 inches below the average for the same period in the 12 preceding years.

Mean cloudiness, 36.44 per cent of the sky, the month being 6.29 per cent clearer than the average. No. of clear days 17, entirely clear 3, half-clear 7, cloudy 6, entirely cloudy none. Mean at 7 a. m. 47.33 per cent, at 2 p. m. 37 per cent, at 9 p. m. 28 per cent.

Wind.—S. 26 times, S. E. 25 times, S. W. 18 times, N. W. 13 times, N. E. 5 times, E. twice, W. once. The entire distance traveled by the wind was 12,629 miles, which gives a mean daily velocity of 421 miles and a mean hourly velocity of 17.62 miles. The highest velocity was 52 miles an hour, on the 5th.

Mean height of barometer, 29.041 inches; at 7 a. m., 29.064 in.; at 2 p. m., 29.023 in.; at 9 p. m., 29.037 in.; maximum, 29.351 in., on the 17th; minimum, 28.533 in., on the 5th; monthly range, 3.813 in.

Relative humidity.—Mean for the month, 68.1; at 7 a. m., 76.3; at 2 p. m., 52.2; at 9 p. m., 75.6; greatest, 94.9 on the 3d; least, 27.6, on the 29th. There was no fog.

Almost every farmer prefers putting his hand to a bright plow, says the World, which turns the furrows with comparative ease, to both team and driver, than one weather-beaten and dulled with the previous season's dirt, and yet many dollars dwindle imperceptibly but surely away each year, and farmers annually grumble, all because of the careless handling of farm machinery. With one accord, reapers and mowers, seed-drills, plows and harrows, are suffered to remain where last employed to bear the action of pelting storms and drying winds. The repairs required the following season will cost more than the building of a shed or tool-house, or the arrangement of a place for them in out-houses already erected.

Teach your boy to love the farm. To do this don't send him out to drop potatoes but give him a horse and carriage and a new whip.

Poultry.

The Poultry Yard.

Next to proper feeding and the roomy quarters for our poultry, it is necessary that both laying and growing fowls should have plenty of exercise daily. Especially is this requisite for the better health and thrift of the heavy breeds, as the Asiatics. But all fowls are largely better off, if they can be kept constantly "on the move" in the day time.

If we notice it, a flock of hens or turkeys entirely at liberty, will roam over miles of field and pasture, back and forth, every day. They never tire of running after winged insects, or digging and scratching in the earth for bugs and worms. So that it is a natural thing for them to be continually on the *qui vive*.

Without this exercise, Cochins and Brahmas quickly become over-fat and "lasy." This extra fattening goes to the internal parts, and shortly interferes with their laying, too. A fat old hen is a precious poor layer of eggs, usually. Don't forget this, fanciers who are continually striving for the heaviest weights on your Cochins, your Colored Dorkings, your Plymouth Rocks and your Light Brahmas. It is so.

Afford the fowls all the exercise they will take. If confined to narrow limits, throw into the pens dry leaves, sand, short straw, weeds, coarse cut hay, gravel, sweepings of yard and lawn, etc., and into this scatter the whole grain at noon and evening. Make them scratch for their dinners or suppers, or both. This will keep them busy, and this is an admirable kind of exercise. And while they enjoy it, it will do them good—every time.

You need not fear that they will ever labor too hard for their own benefit. This continual activity stirs their blood well, promotes digestion, keeps down the too frequent inclination to internal fattening, makes better layers of the hens, and in every way assists toward their thrift and good condition. Plenty of exercise, ample ventilation in the houses, and regular, systematic attendance, will keep fowls in health—even where the quality of their food is comparatively indifferent. Without these, poultry will give you more trouble, oftentimes, than their product is worth.—*Bloomington Journal*.

Apiary.

Rearing Queens and Other Matters.

Where a colony is deprived of its queen, the whole colony is in a state of alarm. The inexperienced will observe the unusual commotion in the hive, and squads of restless bees will be noticed running about the outside of it. About twenty-four hours later, quiet is restored, the bees have realized their loss, and proceed to start queen cells. The first work noticed is the widening of those worker cells containing eggs or larvae, from which they intend to rear queens. We can show them the very cells we want them to use, by widening the openings somewhat, with the end of a pencil.

Worker bees are imperfectly developed females; but from the egg, which produces a worker bee under ordinary circumstances, a queen bee can be reared by enlarging the cell and supplying the larvae with the necessary food, so-called "royal-jelly," a mixture of bee-bread and honey. It requires twenty-one days to hatch a worker bee from the time the egg is laid and sixteen days to hatch a queen, under ordinary circumstances. An hour or two after the young queen has made her appearance, she can be noticed running leisurely over the combs apparently unnoticed by the bees; and wherever she finds a queen cell, we can see her actively at work biting a hole in it at the side, through which she introduces her sting, killing the queen inside. Every other rival queen cell will be served in the same manner, generally in less than twenty-four hours.

If the colony was deprived of its queen, in order to breed queens the prudent bee-keeper will commence to cut out the capped queen cells on the tenth day after the colony was made queenless, and have them hatched out by colonies made queenless for the purpose, or nuclei colonies by laying them on the frames above the brood in the hives.

The stock of bees can be controlled with almost the same certainty as that of horses, cattle or hogs. We select the colonies from which to breed queens, and the colonies from which to breed drones (male bees). As fertilization is consummated on the wing, it should be our object to have an abundance of choice drones on hand in due time, that our young queens, who make their bridal trips generally when four or five days old, have more chance of meeting one of them than a common drone. Herein lies our only reliance of a pure fertilization until that art is better understood.

When the young queen returns from a successful trip, she has the mark of the drone still adhering to her body. The impregnation lasts for life. She moves among the bees like one of them, unnoticed, until the second or third day, when her body appears more developed, looks larger, longer, and she begins to lay eggs. A marked attention is now paid her by the bees of the hive. The sole office of the queen is to lay eggs, while the worker bees build new combs, clean the cells of old combs for the reception of eggs or honey, and do all the work pertaining to the colony.

The labor seems to be divided equally and distinctly. Newly hatched bees, for instance, live first on bee-bread only, until after a day or two; they partake also of honey, and commence to be nurses for the brood, supplying the

larvæ in the cells with the necessary food—a mixture of bee-bread and honey. When five or six days old, the young bees become wax-workers, comb-builders, etc., and within ten or twelve days they are of age, go out foraging, and do no more housework if they can help it. Five to six weeks is the age worker bees attain during the height of the honey season. They disappear—worn out by hard work, a prey to birds and other enemies, drowned, get entangled in the grass, etc. A hive would be decimated in a short time were it not for the great fertility of the queen, who is capable of laying as many as three thousand eggs in a day.

This is the routine of business in a bee-hive. But there is no rule without an exception. So we find in early spring the old bees nursing the first young and doing all the housework. No hive is in thriving condition without plenty of young bees; and as the honey yield is often of a short duration no colony can bring in a large crop of honey without a large number of old worker bees at the proper time.

To have strong colonies in the early part of the season, and to keep them strong as long as the season lasts, should be the object of the bee-keeper.

It happens often to inexperienced bee-keepers that a hive is without a queen for some time, and that, with their best efforts, they do not succeed in introducing a new queen, as the bees will kill every queen liberated among them, and destroy every queen cell given them to hatch. The reason for such conduct is generally that the bees are all old—too old for nurses and for housework—feel no necessity for a queen, and will not tolerate one among them.

Give to such colony two or three combs with hatching brood and all the adhering young bees, from some strong colony or colonies, when a queen will be accepted without any trouble, and the colony will soon be in a normal condition again.—*Charles F. Muth, in Farmers' Home Journal*.

Miscellaneous.

Artesian Wells On the Western Plains.

In the bill for the reclamation of arid and waste lands, passed by the senate on the 11th ult., there is a clause authorizing the secretary of the interior to sink two artesian wells on the plains east of the Rocky Mountains. This provision is an admirable encouragement towards the redemption of vast areas of the national territory from the desolating sway of drought. For, wherever the government finds a good supply of water by borings, the geological inference is that any number of wells may be successfully sunk. A few years ago the French government bored a large number of artesian wells in the Algerian desert, and the result has proved of the greatest economic importance. Every well, it is said, becomes the nucleus of a settlement proportioned to the supply of water. As early as 1860, Prof. Marsh states, several nomad tribes had gathered around these artificial water springs and planted thirty thousand palm trees, turning the desert vicinity into an oasis.

For some time after the completion of the Union Pacific railroad, so great was the difficulty in obtaining water in Wyoming, and so alkaline (rendering it unfit for steam purposes on the locomotives), when it was found that the road was compelled to run "water-trains" from Green River to Rawlins. At the suggestion of the government geologist, Prof. Hayden, a number of artesian wells were sunk at depths varying from 600 to 1,145 feet, with excellent supplies of from 960 to 2,900 gallons of water per hour. This experiment was made in one of the most arid portions of the west, and illustrates, as Prof. Hayden says, "the feasibility of rendering available many millions of acres now lying useless."

In the thirsty soil of the Sahara, where the French engineers have excavated over eighty artesian openings, water has generally risen when they had gone two hundred feet below ground. It may not be so easy to tap the great internal water reservoir of the earth on the plains east of the Rocky Mountains, but it is probable, on theoretical grounds, that the deeper the bore, the fuller the perpetual stream which finally issues, as exemplified in the case of the artesian well at Grenelle near Paris. That noble volume of subterranean water, though not started until nearly 1,800 feet of soil had been perforated, and four years spent in boring, has a thousand-fold repaid its cost, discharging considerably more than half a million gallons every twenty-four hours. The opening of such perennial fountains in the trans-Mississippi districts, where the summer rainfall is deficient, will not only enhance the value of the national domain, but will clear the way for the great tide of immigration now rolling toward the eastern Rocky Mountain slope.—*N. Y. Herald*.

The Army Worm.

The army worm still continues its work of destruction in Long Island, Staten Island, Westchester county, Connecticut, Pennsylvania, Maryland, Delaware and New Jersey. It is generally believed, however, that the period of greatest injury in these localities is passed, and that the worms will now gradually disappear, as they burrow in the ground and pass into the chrysalis state. The insects, however, are appearing in numbers farther north, as expected by Prof. Riley, and the plague is apparently to be a wide-spread one. Whenever grain is so hard that they cannot eat the kernels, they devour the blades and husks, thus killing the grain before it is fully matured. When the grain is still soft they suck the milky juice from the kernels. Oats, which are now in a

green and juicy state and just ready to head, are apparently very palatable to the worms, as they strip off the leaves and head and leave only bare straw behind them. All reports concur that the worm makes a clean sweep of the vegetation in its path. The rustling noise of their eating, like that made in grain by a wind, can be heard at a considerable distance. Nothing except a deep ditch, or a mixture of lard and sulphur, will stop their march. They pass through buildings, if possible, instead of going around.—*Country Gentleman*.

Fruit Trees.

Spring is the season preferred by most persons for planting fruit trees in Kansas, the winters usually being too dry for the unrooted trees to resist the influence of the frost in a dry soil. The following valuable hints from an exchange will be worth remembering as incentives to purchase nursery stock as near home as possible to be supplied with desirable varieties, and it would pay the purchaser well to go to the nursery and overlook the taking-up:

"For long shipments small trees are best, but for home planting larger ones are preferable, not only on account of the formation of the head, but on account of time saved in fruiting. Large trees when dug by machinery, carefully protected and not pressed to death, as is done for long shipment, will make almost a bearing orchard to start with. It is common for trees when planted large to come into almost immediate bearing, whereas trees planted when quite young will be from two to three years longer before beginning to bear.

"As to what to plant, it depends very much on your purpose for use. If for home use alone, plant a variety, a few delicious pears, plums, cherries, and quinces, grown in your own yard, are far more a luxury than when purchased in the measure. The farmer and orchardist should plant largely of apples. If you intend to make fruit growing a specialty, you can plant pears, plums, cherries, grapes, etc., and by watching your trade closely can realize very handsome profits. Four to six dollars, and even more per bushel for the fine fruits, are not uncommon prices, but you must remember that city dealers watch for the inexperienced grower and pick up these fruits for mere nominal sums. Nor can the producer stop to post himself when his crop needs attention. Apples to the fruit trade are like sugar to the grocery trade. No supply can be so great but that a slight cut on prices will readily put them into market. There is not a surer and more profitable thing to plant than winter apples. The wheat and corn crops planted every year fail oftener than the apple crop."

Walter Brown & Co's Monthly Wool Circular.

The wool market for June opened with the same state of quiescence which characterized the preceding month. Manufacturers appeared to be entirely indifferent to the wools offering, and the steady decline in prices failed to lead to any increased activity. The continued neglect on the part of consumers to the purchasing of raw material to any liberal extent, had a depressing effect on the views of dealers, many of whom have been carrying large amounts of foreign wool, which they were anxious to dispose of, before taking in stocks of the new clip; and the result was a further decline in prices of from 5 to 10 per cent, the greatest concessions being on medium and low grades.

The course pursued this year in regard to the new wools, is almost directly the opposite of what is usually experienced. In previous years, when the shearing had begun, it had been customary for both eastern dealers and manufacturers to rush into the interior, and entering into competition with the local speculators, to buy up a large portion of the clip before the end of June. This season the reverse has been the case; eastern buyers apparently have not had sufficient confidence to operate largely, unless at prices comparatively very low, and the growers, with the experience of last year before them, when they sold at low prices, and saw the rapid advance of the fall and winter, have not generally been disposed to meet the views of operators, but preferred to hold in the hope of an improvement later on.

During the past week there has been more activity in all classes of wool, the sales aggregating somewhat over 2½ million pounds, and there is evidently a firmer and better feeling prevailing. It is generally believed that prices have touched bottom for the present, and holders would not, to-day, take prices which a fortnight ago would have been eagerly accepted.

Manufacturers, while they appear convinced that wools on the present basis are cheap, are at the same time disposed to move cautiously, having in view the large amounts of both domestic and foreign staple, which have been carried over since the break in April. The transactions of the past few days have not generally been at any higher prices than those of the previous two weeks, but they have been on a more settled basis, and tend to give more confidence in those interested in the future stability of the raw material.

The favorable movement is, in a measure, due to an improved tone in the dry goods market, which has prevailed for the past three weeks; this is not so evident in the new business transacted, as in the completion of orders taken some months ago which it was feared, when the dull period set in, would in many instances be repudiated by the purchasers. Manufacturers can now continue their productions for the next few months, with more surety of being able to obtain a fair profit on the cost of their cloths.

The fall in values of the past few months is most noticeable in the medium and low grades,

and is especially evident in the decline on super pulled wools, which during the activity of the late winters reached a point higher in proportion than any other class. Good supers which in February commanded 62 and 65c, can to-day be bought for 42 and 45c, a decline of over 30 per cent. This point we commented upon in our last issue, and we would again call the attention of operators to the fact, that the demand for goods is now tending toward finer fabrics than have been worn during the past few years, and the consumption of low medium and coarse wools, for clothing purposes, will undoubtedly be much less during the present season than for some time previous. On this account great care should be exercised by buyers in the country in selecting those clips which are comparatively free from the objectionable qualities. Growers should also bear in mind when increasing their flocks, that the most saleable wools, such as will command the highest prices on the market, either for clothing or combing purposes, are those of good medium and fine grades, when presented in the best possible condition, as regards cleanliness and soundness of staple.

The developments of the past week are not sufficient to justify any positive assertion regarding the future, but they would lead us to believe that wools are now as low as they are likely to be for some time to come. We can hardly expect any rapid advance from present selling prices, in view of the large stocks already seeking an outlet in the seaboard markets, and the bulk of the new clip still back in the interiors, but we can reasonably look for a steady market with a good healthy trade; and in the event of an increased demand from consumers, possibly a gradual hardening in values during the next thirty to sixty days. With this view it would appear safe for local buyers to operate on the present basis of values, with a confidence of obtaining a reasonable profit on their purchases.

Butter-Making in Holstein.

As the foreign markets for American butter are rapidly widening, of course displacing to a greater or less extent the butter product of competing dairymen in other countries, it becomes a matter of interest and importance to know something of butter making in those foreign countries which are supplying butter to the same customers we are seeking to serve.

The butters made in Holstein hold a high position in the market and are mostly shipped from Hamburg and Kiel. The milk is set in wooden tubs or keelers laid on the floor of the dairies, and where large numbers of cows are kept the floor space required is very considerable. It is kept for thirty-six hours before skimming. The cream is kept till it is quite sour before churning, but no special rule is adopted for regulating this process. They use the thermometer to regulate the temperature for churning, but that is the only time they use it. When the butter comes they stop churning, and wash in cold water by hand, and wash it out finally and incorporate the salt on the butter worker. They use about four per cent, of salt. They use coloring, and put it in the cream before churning. They use beech casks with white hoops. They turn all their skim-milk to cheese and give the whey and buttermilk to pigs, of which large numbers are kept, mostly of the Berkshire and Yorkshire breeds.

The farms here are mostly in a state of tillage, and as there is but little permanent grass the cattle are fed on clover and other soiling crops during the summer, and in the winter they are housed from November to May, and are fed on hay and straw and oil cake and grain—no roots. The small farmers either sell their milk to the larger dairymen, which is much the custom, or they make butter themselves, in which case they do nothing to it but press out what buttermilk they can by hand, and do not wash or salt it, but sell it in lumps to buyers from Hamburg, who go round the villages on certain days, and who finish the working and salt and tub it themselves.

Replacing a Horse's Shoe.

In the busy season on the farm there is often much time lost and work delayed by frequent journeys to the blacksmith shop. Many of these visits are unavoidable; but when made for the simple resetting of a single horseshoe, it is expensive. A job like the replacing of a "thrown" shoe should be done at home. It is not a difficult one, and the needed tools are few and inexpensive. A light hammer, a pair of pincers, a punch, all of which every farmer's workshop should contain for other uses, and a few horseshoe nails, are all that is necessary. It might be well to add that a blacksmith's plane to smooth down the face of the foot, but for the simple resetting of the shoe this is not required. If the shoe is only loose, it may be tightened by driving up the old nails and clinching them anew, but if quite loose it had better be taken off, which can be done with the pincers, care being taken not to break the hoof. All the old nails should be removed by using the punch. The most difficult matter is the driving of the new nails, which must be so "pointed" at the end that they may not go into the "quick," but come to the upper surface of the hoof an inch or so above the sole. This can be learned by watching a blacksmith, and if he is a good-natured one he will willingly show how it is done. A little practice will render it an easy matter to drive the nails in the proper manner. As the nails are driven through, they should be turned down, and afterwards nipped off with the pincers and curved in to hold firmly. The work of resetting a shoe can be quickly done, and at a time when no loss is incurred. The morning before work,

or the hour of rest at noon, may be so employed, and a journey saved, of miles it may be, to the nearest blacksmith. The shoe may come off at a time when replacing it at once will save the labor of the team and hands for a half a day or more, in which case the ability to reset the shoe is a very labor-saving accomplishment, and should be possessed by every economic and energetic farmer throughout the country.—*American Agriculturist*.

The Elm and Maple.

The elm, beautiful as it is for a roadside tree, and to shade the homestead, is obnoxious agriculturally. The roots extend as far certainly as the tree is high, and rob all other plants within this distance of the food they need. See that row of elms along the boundary wall, with the corn-field on the other side. In the influence of the trees, though not shaded by them, the corn will be found smaller than further on; and, during a dry time, the crop is seen to shrivel,—all which goes to show what a feeder and drinker the elm is. It requires liberal manuring to get good mowing within forty feet of this tree.

The maple seems only to injure by its shade. The roots do not apparently extend far, nor do they occasion other plants to want, to any great degree, either food or water, and they can be successfully grown in the close vicinity. Not to speak of this tree as a sugar-maker, it is on other accounts the farmer's tree beyond most others, and should be his favorite. For cities we commend the elm. Its habit of growth raises its branches high in air and allows of circulation of air, and leaves an unobstructed view for a considerable space in height and breadth up and down the avenue. While its leafy bowers give ample shade by day, it is yet not so close as to shut out all rays of the moon by night, and so unduly darken the avenue. The network of roots filling the ground below makes the roadway dark, and constitutes the filth always settling down in the city soil, leaving it more wholesome.

The village, with its more open streets and larger spaces, gives ample room for the maple, which does not fill its front yards with roots to the exclusion of others,—a tree which "lives and lets live," whereas the elm is grasping, and knows nothing but selfishness.—*Scientific Farmer*.

Curing Balky Horses.

A writer in one of our Canada exchanges gives his method of curing balky horses. He says:

I would prepare myself with a good strap—I want no whip; perhaps he has got a taste of that already, and still he is master. But some fine day when I was at peace with myself and all around, I would hitch him to the buggy, turning his head to the village. He goes half the way very well indeed; then he begins to consider that he has gone far enough in that direction and stops. I step down; he expects me to use the whip. He is mistaken. As a criminal I treat him on the silent system. I push him back a little out of the way. I show him the strap, putting it up to his nose. I go to the off side and buckle it to his off fore leg, close up to his breast, throwing the end over his shoulder; I then raise his near fore foot and fix it with the hoof nearly touching the belly. This done, I say, "Now old chap, you just stand there." I don't smoke, so I take a paper from my pocket and finding a place where I can sit down and he see me, I begin to read. This is something he did not bargain for, and the novelty of standing on three legs somewhat diverts his mind from the cause that stopped him. I think this is the chief point to be gained and the most humane. When the strap is taken off, I show it to him, caress him a little, and we move on without irritation. The strap will now become a part of the harness for a month or two, till at last the sight of it will act as a talisman.

Wonders of America.

The greatest cataract in the world is the Falls of Niagara, where the water from the great upper lakes form a river of three-fourths of a mile in width, and then being suddenly contracted plunges over the rocks in two columns to the depth of 160 feet. The greatest cave in the world is the Mammoth cave of Kentucky, where any one can make a voyage on the waters of a subterranean river and catch fish without eyes. The Mississippi is 4,000 miles long, and its valley contains 5,000,000 square miles, and is one of the most fertile regions on the globe. The greatest city park in the world is in Philadelphia. It contains over 2,700 acres. The greatest grain port in the world is Chicago. The largest lake in the world is Lake Superior, which is truly an inland sea, being 430 miles long, and 1,000 feet deep. The longest railroad at present is the Pacific railroad, over 3,000 miles in length. The greatest mass of solid iron in the world is the Pilot Knob of Missouri. It is 350 feet high and two miles in circuit. The best specimen of Grecian architecture in the world is the Girard College for orphans, Philadelphia. The largest aqueduct in the world is the Croton aqueduct, New York; its length is 40½ miles, and it cost \$12,500,000. The largest deposit of anthracite coal in the world are in Pennsylvania, the mines of which supply the market with millions of tons annually.

A prize of \$25 is offered by the American Berkshire Association for the best Berkshire barrow at the Chicago Fat Stock show in November next. By the rules of the exhibition, well authenticated pedigrees of the animals competing for the prize will be required.

THE KANSAS FARMER.

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

TERMS: CASH IN ADVANCE.
One Copy, Weekly, for one year, 1.50
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The greatest care is used to prevent swindling humbugs securing space in these advertising columns. Advertisements of lotteries, whisky bitters, and quick doctors are not received. We accept advertisements only for cash, cannot give space and take pay in trade of any kind. This is business, and it is a just and equitable rule adhered to in the publication of THE FARMER.

TO SUBSCRIBERS.

Subscribers should very carefully notice the label stamped upon the margin of their papers. All those marked 28 expire with the next issue. The paper is at once discontinued at the expiration of the time paid for, and to avoid missing a number renewals should be made at once.

A PREMIUM OFFER.

The Farmer For 75 Cents.

The KANSAS FARMER will be furnished from the first of July till the end of the year 1880, to single subscribers for 75 cents, and every old subscriber forwarding a new name with the money will have his own subscription extended one month. Now, friends, let us see if the list of subscribers to the "Old Reliable" cannot be doubled by January 1st, 1881, so that we can start a boom for clubs with the New Year. Every farmer and grange patron should feel it a religious duty to assist the publications, which are enlisted in their cause, and fighting the gigantic usurpations and monopolies which are springing up on every hand. Postage stamps are convenient for small remittances.

Stock vs. Wheat.

"The wheat market declined very rapidly the past week and prices are lower than they have been for a year on all grades."

The above paragraph we clip from a market report in one of our city exchanges. It is almost a stereotyped phrase for this season of the year, the same in substance appearing every year, as long as we can remember, about the time farmers are preparing to put their new crop on the market. Wheat culture is one of the *ignis fatuus* of farming. If we trace the march of wheat farming across the continent from the Atlantic to the Pacific, through the middle of our country, its course is marked by impoverished farms.

The "wheat belt" has been continually shifting. As soon as the virgin richness of one region was exhausted, it moved west with that insatiable appetite which devours new land without a peer save in cotton and tobacco. The two latter have devastated the fairest agricultural portions of the United States from Virginia to the Gulf, while wheat farming has extended its ravages from the James river to the lakes, moving west, leaving a broad swath of impoverished land filled with innumerable insects, which multiply by feeding on the plant.

This result is no fault of the plants to which is traced these ruinous consequences, but is wholly attributable to the blind system of farming which has been stubbornly pursued. Wheat raising seems to have a captivation for the average farmer which is irresistible. While five to ten bushels can be squeezed from the constantly failing soil, he continues to plow and sow. Every spear of grass is exterminated and stock is expelled from the land, in order that the all-devouring wheat may appropriate what little strength yet remains. The deluded pioneer has pursued and is still pursuing this phantom of a speedy fortune in raising wheat, over the plains of fair Kansas and Nebraska, and away up among the boreal regions of Manitoba. Behold the result on our western prairies. Low prices when the crop is ready for market, with a partial or total failure two years of every three. Few men have followed wheat raising exclusively for ten years and found themselves as well off as when they began. The bonanza farms are sure to be bankrupted and the land left a desert.

Let us return to the east where the lands have been "played out" by cropping with wheat, and find them being slowly and painfully resuscitated by grass and stock. Where a judicious system of what is termed "mixed farming" is pursued, the land being kept in grass as far as possible and the main dependence of the farmer is on stock, more wheat is produced on ten acres than on thirty under the wheat cropping system. Nature's grand protector of soil is shade and mulch. In winter she covers the surface with dead leaves and decaying vegetation. In summer it is shaded with green herbage, grass and foliage. Rapid evaporation is stopped. The elements of fertility in decaying vegetation and the rains are stored away for future use of plants. The farmer who imitates the processes of nature as closely as possible in his system of agriculture, is invariably the most prosperous. By grass and stock-raising, where the greater proportion of the constituents of plant food is returned to the soil, is the mode by which the farmer approaches nearest to natural laws for keeping up the fertility of his soil. A fertile soil is the sheet anchor of farming. Without this farming is a total failure. With a rich soil to depend on, large quantities of grain can be gathered from a few acres, while the balance of the farm is protected by a warm turf which feeds cattle, sheep and swine.

In Kansas and Nebraska millions of acres of virgin grass are being destroyed to make room for the all-devouring wheat field, which should be appropriated to the production of wool and meat, and small areas well tilled should be appropriated to annual crops mainly for the purpose of winter feed for the stock, which is a con-

stant and sure source of income, defying drouths and insect visitations.

When will our farmers learn the folly of putting thousands of dollars in machinery to destroy the wealth which nature has placed at their feet, in place of into stock, and patiently biding their time for a few years, when a bountiful income is sure. The glittering delusion of reaping a golden wheat crop in six months, continues to blast the hopes of thousands every year.

Selecting Breeding Stock.

This is a matter which receives too little attention among farmers, and by this habitual neglect—or more often, want of proper information—subject themselves to much loss. Most farmers have only grades or common stock. If they would make it an unvarying rule to couple none but thoroughbred males with their grade females, the value of their stock, with decent care, would double in three years.

It is not enough, however, to provide the best thoroughbred males; the females should be selected and none but the best saved. Let the butcher have the culls. He will invariably select the best and leave the farmer the culls if allowed, and by this short sighted process in selling the best because they will bring a few dollars more money, a farmer has soon found his whole stock a lot of culls, which yield but a pittance of profit for their care and feed, when if he had reserved all of his best heifer calves, ewe lambs and sows, and bred them to none but thoroughbred males, his sales of stock to the butcher would soon amount to double what they usually do, and in place of a lot of culls he would invariably have select for sale.

Farmers, for convenience or economy—ill-judged economy, however—are often tempted to keep a fine looking grade bull calf to breed from, in place of converting him to a thrifty, ready-selling steer. They consider it both a trouble and expense to hire the services of thoroughbred animals a neighbor may have, and the time lost in driving back and forth at a busy season is allowed to sway their judgment, but if a farmer feels himself unable to own such male stock he should allow no trifling considerations to stand between him and the improvement of his breeding stock, on which he should rely as the principal source of his future income.

Very few farmers should attempt to raise male stock to breed from, but patronize professional breeders; purchase the use of bulls, bucks and boars from men who make a specialty of thoroughbred stock. Two, three or more farmers could often very profitably join in the purchase of male animals, or they might exchange animals after having used them two years. Co-operation among farmers might be made very advantageous in stock-raising; or an association of farmers might supply themselves with every class of the most improved stock, including high-bred horses, with a central, convenient point at which to keep such stock and a trusty man to take care of it. No other arrangement they could enter into would pay them better than a well organized association for the improvement of farm stock.

The farmers of Kansas have it in their power to form such stock associations, by which mutual aid and co-operation they could have the use of the best of high-bred stock on their native animals. They could lay out ranges among their farms for summer pasture, and by moving from range to range which would be excluded from outsiders, always have fresh grass and water for the stock, which would continue thrifty and improving through the season. They could raise cattle, or sheep, or both, and by a well matured system strictly carried out, make much more money than by the present haphazard, isolated fashion, handed down from the "good old days" of rough knocks and rough living, plow-farming and breeding scrub-stock.

Farmers

Have you been giving anytime or independent thought to a grave duty which rests on you to perform? That duty is consulting together and selecting your ablest men who possess sterling integrity, to represent you in the legislature and other offices this winter. Farmers of all political persuasions should be agreed, before the primary meetings are held, as to the proper candidates to place in nomination at those primaries, and there back them with sufficient strength to complete their nomination, and constitute the tickets of each political party mainly of the best farmers for public business in the state. Those in the last legislature who acquitted themselves honestly and endeavored to do their duty should be returned. The knowledge they acquired in that session will be available in the next, and an old member of that kind can be of infinitely more service than a new man. The interest of the state would be promoted by the repeal of many of the laws and parts of laws on her statute books, while the passage of new acts is greatly needed. See to it, farmers, that you have the controlling power in the legislature this winter placed in the hands of such men as can be relied upon in case of emergency, and who are composed of stuff stern enough not to tamely submit to the system of snubbing and brow-beating which is sure to be attempted by slystering lawyers who are ever present in force from the towns and villages.

A Wise Choice.

J. K. Hudson, Secretary of the State Board of Agriculture, has invited Mr. F. D. Coburn, of this county, to an important position in that office; which offer Mr. Coburn has accepted. This is a very wise choice. It is a credit to Major Hudson and the Board that a practical farmer should be invited to take a desk in the

office, an innovation that in this case will be of peculiar value. Mr. Coburn not only possesses large practical knowledge of all branches of agriculture, but he is an intelligent, educated man as well. He has never made any noise as a politician, never having figured among the wire-pullers; what notoriety he has—which is not a little—he has made with midnight oil, at a little desk away out on a prairie farm. We shall expect to hear of him more than ever now, in his new sphere, for he is too young and energetic a man to be buried in a back office.—*Ottawa Republican*.

To this well merited notice we add our hearty endorsement. A better assistant could not have been found in the state for the work of the State Board of Agriculture. To the full measure of qualification in point of scholarly attainments, and a knowledge of practical farming, as a representative of the agricultural class, the selection of Mr. Coburn is peculiarly happy. Mr. Coburn is the author of a work on Swine Husbandry, which is one of the standard works on the pig, and a work of great value to western farmers. If the people, this fall, will select representatives for the legislature as well fitted to fill the office and as creditable to the state as Major Hudson's choice of assistant in the work of the State Board, it will be an immense gain over past experience.

Premium Lists.

Among the premium lists of agricultural fairs received this week is the Iowa State Agricultural Society, whose exhibition will be held at Des Moines, Iowa, September 6th, 7th, 8th, 9th and 10th. The premiums are numerous, but mostly small, except in the horse-race department, which occupies the opening chapters with its big stakes!

The Western National Fair, at Bismarck, Kansas, bids fair to be the big thing among agricultural fairs west of the Mississippi river this season. Great efforts are being made and every nerve strained by the managers to make Bismarck Fair the most noted in the state. It will be held September 13th, 14th, 15th, 16th, 17th and 18th.

Thirty thousand dollars is appropriated for premiums, and the scale of premiums is arranged with discriminating judgement to the merits and utility the article and its class occupy in the great economy of agriculture. We have not been favored yet by the secretary with a copy of the premium list, but through the kindness of a friend have been enabled to give it a cursory examination.

A Profitable Flock.

Judge N. C. McFarland, of this city, while at Neosho Falls last week, gathered the following particulars of the Messrs. Wiedes' flock of Merinos:

Godfrey Weide and sons, living on Turkey Creek, Woodson county, Kansas, sheared 913 sheep—387 ewes, 210 wethers, 300 yearlings and 16 bucks—and had 15,580 pounds of wool (unwashed) averaging nearly 15 pounds per head. They sold the wool to Swan, of Emporia, at 22 cents per pound. They raised from the 387 ewes 400 lambs. The sheep are of Merino stock and were originally brought from Ohio. The statement was made to the judge by one of the Weide sons, and his veracity is vouched for by Capt. Haughwout and Senator Finney, of Neosho Falls. Good stock and plenty of care and feed did the business.

The Buckeye Machine.

C. Aultman & Co., of Canton, Ohio, have sent us their annual descriptive catalogue of their harvesting machines and other farming machinery. A glance through the catalogue reveals the wonderful establishment of this firm, and the astonishing popularity of the Buckeye harvesting machines, which have made a record second to no other machines in the world. The Buckeye has always been a favorite among practical farmers.

Give the Direction and Distance.

It would be often a satisfaction to strangers, and persons in the east, if correspondents would state, in their farm letters, the distance and direction from Topeka at the point from which they write. Some of our correspondents have adopted this method and it proves very satisfactory to most readers. The farm letters are much sought after and are very highly prized by a large class of our readers.

Hubbard's Right Hand Record.

On account of a severe press of business, we have too long delayed a careful examination, and what merits a well-deserved notice, Hubbard's Right Hand Newspaper Directory of the World. This is one of the best arranged and most valuable newspaper records that has been compiled, for the use of advertisers and publishers. Mr. Hubbard informs us that he is running advertisements in over 6,000 newspapers.

The state convention of the greenback-labor party of Kansas, will be held at the State House, Topeka, on Wednesday, the 28th day of July, 1880, at 11 o'clock a. m., for the purpose of nominating a state ticket, and transacting such other business as may come before the convention. Each representative district will be entitled to two delegates and two alternates. All in favor of industrial emancipation are invited to unite in sending delegates to the convention.

Seedling Peach.

Peter Heile, Jr., whose farm is a few miles from this city, has a new seedling peach which promises to be a valuable acquisition to the early varieties. It is a blood-red, about the

size of the Amaden, and of fine flavor. The peach is medium size and ripens in June.

Our subscribers are requested to examine the slip attached to their paper and not allow their subscriptions to expire without renewing. Every subscriber to the FARMER could easily obtain the name of one or more neighbors to add to our subscription list. From the first of July till the first of January, 1881, we will furnish the FARMER to single subscribers for 75 cents, and every old subscriber furnishing us with a new name and enclosing that amount in postage stamps, will have his subscription extended one month.

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.

The Absorption of Capital by the Power of Monopoly.

Hon. O. B. Galusha, of Illinois, closes an able article published in the *Farmers' Review*, with the following words of warning and sound advice:

The great question before the American farmer to-day is: Can this tendency to aggregation of capital, by which the capitalists obtain power over the non-capitalists, be checked or controlled?

If not, then it is only a question of time that the masses will become reduced to a condition of abject servitude to the minority who possess the wealth and consequently the power to rule. I will not enlarge by picturing the evils which must result from this tendency, my only object being to call the attention of the intelligent, thinking farmers to the subject that each may for himself follow out the train of thought and reach the inevitable conclusion.

The history of the human race is replete with precedents to the fate of our own nation, if this tendency is not speedily checked.

What then is the remedy? Believing as I do that in our republican form of government the cause of this tendency and the remedy therefore lies with the farmers of the country more than with any other class of citizens, I appeal to them to ask themselves if the primal cause is not in the neglect on the part of the intelligent and honest voters to take such steps as shall secure just legislation?

The first error consists in allowing the primary meetings, the caucuses for the nomination of candidates for office to be packed, selected and controlled by cunning, ambitious persons, who in this way secure their own election. Money is spent without stint for the purposes of lifting these men into places of trust and power; and it is to be supposed that such men will, as soon as they are safe in their coveted seats in the state or national legislature at once cast away all their selfish ambition and henceforth have an eye single to the best interests of the people? This is not human nature; and so long as we allow men to work for and buy positions of honor, so long must we expect that they will still use their positions for the purposes of their own greed, glory or self-aggrandizement; and just so long will money control all legislation which they may effect.

When the time comes that an intimation even from any man that he desires an office is accepted by all as a sufficient reason why he should not be elected to it, that time will be the dawn of hope for a system of legislation which will check monopolies and bring the greatest good to the greatest number.

This may be accomplished if the work is steadily begun, and fearlessly and conscientiously prosecuted, though it will even now cost a fearful struggle, and require all the ability, energy and conscientious devotion to the cause of truth and humanity of our ablest and best men.

This is a wide field for thought and careful study, and the limits of a newspaper article will not allow entering upon it.

Let us then, brother farmers, look about us, and see who, among all the intelligent, honest and true men within the bounds of our districts, we would prefer to entrust with the responsible duty of making or administering laws; and then united—not under a party name, but in the name of humanity and justice, and see to it that those men are chosen as servants of the people—the whole people."

An Explanation Demanded.

Congress has adjourned without having taken action upon any of the bills that had been introduced and referred to in reference to contagious diseases among our domesticated animals. We are not surprised at this. Early in the season we were not without the hope that Gen. Keifer's bill, or something similar to it, might become a law; but later it became evident that petty jealousies, existing where we had a right to expect the broadest catholicity of spirit when the interests of agriculture were involved, would stand seriously in the way of the passage of any bill that those familiar with the details of the subject might propose. We wish it distinctly understood that the responsibility for the failure to enact a law, at the last session, that should protect the great cattle-raising regions of the west from the impending peril of contagious pleuro-pneumonia, rests solely with the committee of agriculture of the house. The house stood ready to pass, without delay, any well-digested measure that this committee might recommend; and it is also well-known that the senate would have acted promptly and

favorably upon any bill on this subject that came to it with the sanction of the house. Why did not the sub-committee having charge of the bills that had been proposed by Gen. Keifer, Gen. Curtis, Judge French, and others, make a report? An explanation from these gentlemen, and especially from Hon. Wm. H. Hatch, of Hannibal, Mo., chairman of the sub-committee, is in order, and is demanded by the representatives of millions of property left in imminent peril by the failure of this committee to act.

Farmers from the Atlantic to the Pacific, whose property stands exposed to the ravages of a steadily advancing scourge, which gathers strength with each succeeding hour, and which, if we are to judge by its effects in other countries, threatens to involve them in pecuniary losses of appalling magnitude, will not fail to hold their representatives to a strict account for so glaring a remissness of duty. They have petitioned, they have implored the interposition of congressional legislation as the only means by which protection could be assured. Able representatives of this interest have journeyed to Washington, and have laid the facts before our law-makers there. Our own *Journal*, ably seconded by many others, has, month after month, urged the importance of the measures pending, and yet nothing has been done. Will the great live-stock interest of this country remain patient under this neglect? It strikes us that the stock breeders and farmers of the west may well demand from Mr. Hatch, of Missouri, an explanation of the action of his committee upon this question.—*Nat. Live-Stock Journal*.

We trust that the farmers of Missouri will attend to Mr. Hatch's case at the first opportunity, and that the *Journal of Agriculture* will not allow them to forget.

A Perpetual Rabbit Trap.

In *Coleman's Rural World* we find the following description of a rabbit trap that is always set. Rabbits are very troublesome in some parts of Kansas and we advise the boys to get an old barrel and make such a trap for the rabbits.

Every man who possesses an orchard should trap rabbits every winter. We would recommend a trap which has the advantages of cheapness, simplicity, and perpetual action, as, however many rabbits there may be in it, it is always ready to take in one more. To make this trap, take an empty salt barrel with one head out and saw out a square in one side of the open end just large enough to receive the box. Take three boards as long as the diameter of the barrel and nail them together, making the top and sides of the box. The staves of the barrel will make one end of the box, while the other is left open. Now make the bottom of the box so that it will play easily, and fasten it on pivots (two nails will do) about one-third of the way from the front or open end. The short end of the bottom board should be weighted, and be made to extend over the end of the staves in front, so that the bottom will remain in a horizontal position when undisturbed, be firm when first stepped upon, but trip up as soon as the rabbit passes in a short distance. Insert this box thus prepared in the top of the barrel and sink the barrel in the ground. Cover the top of the barrel with boards, and let them extend a few inches over the side where the opening is made; throw some brush over the boards, and you have a perfect trap always ready for use. Test its qualifications the coming winter and report.

In the absorbing labors of the farm, and turmoil of an exciting political canvass, there is danger that many farmers will neglect an important duty that must have performance or there will be sure penalty following neglect. The duty is to keep the transportation question closely in view with the purpose of securing wholesome legislation next winter. It is rather more important that suitable representatives be sent to both state and national legislatures—men who look to the interest of the industries that bring commercial prosperity to the country—than the election to the presidential office of either of the candidates named. It is important, first that we have just laws, and then that they be executed. All efforts to provide wise measures for the regulation of internal commerce have hitherto proved unavailing because the people have not supported the few earnest workers who have striven to remedy the evils attaching to the present loose system. Apathy on the part of the general public, if long continued, will make the question of railway powers and privileges exceedingly difficult to regulate in accordance with the principles of justice. Now is the time to give it careful consideration.—*Husbandman*.

Messrs. H. H. Warner & Co.: Gentlemen: I have been afflicted with a disease of the kidneys for the past two years and have tried numerous remedies with only partial and temporary relief. Your safe kidney and liver cure was recommended to me, and after taking it the pain and distress left me and I am to-day feeling strong and well. I am perfectly satisfied that Warner's safe remedies are the medicines needed, and can cheerfully commend them to others.

G. W. STAMM, Editor "The Industrial Era."
Albia, Iowa, June, 1880.

Kidney wort has proved the most effective cure for piles and constipation—he sure to try it.

Feeble Ladies.

You feel languid, tire some sensations, causing you to lose scarcely able to be on your feet; that constant drain that is taking from your system all its elasticity; driving the bloom from your cheeks; that continual strain upon your vital forces, rendering you irritable and fretful, can easily be removed by the use of that marvelous remedy, hop bitters. Irregularities and obstructions of your system are relieved at once, while the special cause for periodical pain is permanently removed. Will you heed this?

The Forests of the United States.

By the following circular letter we learn that in addition to the customary information furnished by the census reports that the tenth census will be enriched by a better knowledge of the forest growth of the United States than is now possessed. Mr. Charles S. Sargent, Professor of Agriculture in Harvard University, has been appointed to this duty. He desires information from botanists and any who can impart any information on the following subjects:

1. The extreme geographical range of any species.
2. The region and elevation where any species is principally multiplied and reaches its greatest perfection.
3. The geological formation most favorable to the multiplication and development of any species.
4. Dimensions of remarkably developed specimens of any species.
5. The common or local name of any species in addition to those already given.
6. The purpose, however unimportant, for which the wood of any species is employed.
7. Products of any species other than wood, such as tannin, charcoal, dyes, potash, edible fruit, forage, etc.

In addition to the information thus sought for, and sure to be liberally furnished from every quarter, Mr. Sargent, with the aid of several distinguished botanists, is himself about to devote the summer to a series of scientific explorations. He will begin by visiting Kansas to study the tree distribution on the eastern edge of the prairie and plain region. Then he will go through Colorado, and possibly New Mexico, to examine on the spot the heavy timber in the canons of the western spurs of the Rocky Mountains. That labor completed, he will proceed by rail and sea to Victoria, and thence southward through Puget Sound to Portland, Oregon; then south along the western flank of the Cascade Mountains to Roseburg, Douglas county, Oregon, where the party will make their headquarters for some time in order to examine the peculiar and little known forest vegetation of that region. Thence south again to the Mt. Shasta country, in northern California, where so many of the peculiar California trees were first discovered by Douglas and Jeffrey. From a botanical point of view the stay at Roseburg and in the neighborhood of Shasta will probably be the most interesting. On the way back from northern California, the party will visit the great forest of Sequoias, at the head of the Kern river in the southern Sierras.

In Kansas and Colorado Mr. Sargent will be accompanied by Mr. Robert Douglas, of Waukegan, and from Salt Lake westward by Dr. George Engelmann, of St. Louis, and Dr. Parry. The two latter, who are officially connected with the investigation, will pass the next winter in southern California, and return thence by way of Arizona and New Mexico in the spring. Mr. Sargent, who was the botanist attached to the survey of the fortieth parallel, under Mr. Clarence King, and is now curator of the Harvard herbarium, is also associated with Mr. Sargent, and is about to go to the northern terminus of the Utah Northern railroad in order to examine the forest distribution of the region between the 100th degree of longitude and the eastern flank of the Cascades and Rocky Mountains, and from the line of the Northern Pacific railroad north to the Canadian boundary. Of the whole United States, this is the part whose vegetable and forest productions are least known, and the discoveries which Mr. Watson may be expected to make will doubtless prove of great scientific and economical value, especially with reference to the supplies of timber which may be hereafter derived from that vast region.

A Jackass that Wouldn't Soar.

A vagrant ass stood beside the track of the Sunset railway at the depot a few mornings ago; an engine moved slowly up; it stopped within a few feet of the ass; the engineer blew one of those terrible screams prolonged and ear-piercing—such a blast as makes a sleeping Millerite dream of the day of judgment. Did the ass scare? Not worth a cent. Did he shake the sloth from his limbs, erect his tail, and speed away like the asses of Bassorah, faster than the Bedouin couriers run back to the chapparal? No, he didn't. He turned one ear toward the engine, just as a deaf man uses his tin ear-trumpet, and caught every particle of the sound. And when the steam-blown whistle ceased its notes, and all the echoes died away, the animal straightened out his neck, opened his mouth, and in a voice that deafened all the railroad men, and caused the freight clerk to drop his pen, roared: "I can't! I can't! I can't! I can't! I can't be beat! I can't be beat! I can't be beat! I can't be beat!"—*San Antonio Herald.*

To have clean wool, one must have clean pastures; and to have clean pastures one must be rigid in destroying burrs and weeds. A good sheep farmer when he hires a man will tell him that one part of his duty is to destroy burrs, and that if he ever sees him pass one in the pasture without pulling it up, his services will be no longer required. Some hired men walk along with their heads so high that they can never see anything that needs doing. They will see tools, implements and other things lying around in the yard or field, and never think. If they were looking to the interests of their employer, they would pick them up and put them in the tool-house, wood-house, barn or stable where they belong. They will run over them a dozen times a day, leaving them exposed to the weather, without thinking that

there is a proper place for them and that they ought to be in that place. They will see rails off the fence and things going to destruction without taking a minute or two to repair them. When farmers hire men they should tell them plainly to keep a sharp watch over everything, to keep everything in its place and everything in repair, and they should reprove them sharply for every omission to do it. It will make better farm hands and be much better for the farmer himself.—*Coleman's Rural World.*

What the Grange Has Done.

We think the grange has accomplished a great deal,—has cheapened transportation, broken up warehouse monopolies, demoralized rings in trade, prevented the extension of patents, had laws enacted for their protection, gained important decisions through superior courts. Notwithstanding all it has accomplished, there is a great deal more for it to do. There appears no power without concert of action sufficient to cope with the huge railroad monopolies that are closing their deathly grasp upon us. We must have unity of action to stay the coils of this huge monster before we are reduced to serfdom—"hewers of wood and drawers of water" for the railroad aristocrat who revels in luxury and extravagance and vice, which is paid for out of the hard earnings of the toiling millions.

Nor is that all we have to do. We must educate the farmer morally, mentally and physically; teach him to be honest, deal justly and fear naught, educate his children, to elevate the tillers of the soil; and last but not least, demand that congress open up the natural channels of transportation, encourage agriculture, manufactures, arts and science, and all that tends to make a nation prosperous and happy.—*J. R. S., in Illinois State Grange News.*

Speak Out, Farmers and Patrons.

Soon the state and county agricultural societies will be in the midst of busy preparations for the fall exhibitions, and it is not too early for farmers to make their voices heard in the matter of horse-racing, gambling and liquor selling at the agricultural fairs. The granges should speak out in this matter in tones that could not be misunderstood. Wherever they have done so the effect has been beneficial. Then let all speak out untriedly and fearlessly against these stock-gambling features of our fall exhibitions. If an agricultural society of any state or county must depend upon no other source of revenue than the evils complained of for financial maintenance the sooner it gives up the ghost the better it will be for the good morals of a community. An agricultural fair is to show the progress of agriculture and mechanism scientifically, and horse-races and gambling broths are nothing but wicked interferences with the fulfillment of its beneficent mission. Speak out, farmers and patrons.—*Farmers' Friend.*

The farmer's wife or the farmer's daughter can be a cultivator of good poultry to advantage. And yet it is not every farmer's wife, or daughter, who is disposed to give that share of attention to this industry which the business is worthy of.

The old-style notions of country people rule, in this work, as a general thing; and if the women can find around the haymow, in the mangers, or upon the barn floor, a few eggs now and then—they appear to be satisfied—as their mothers and grandmothers before them were—that it is all right.

If the women in the country household would only take the trouble to cull the common fowl-stock that is found about the homestead door in large numbers almost everywhere in this country, and select a dozen or two of the best birds, and grow them carefully for a year or two, each year selecting the best and finest hens and cockerels, and giving this subject of chicken-breeding an hour or two of their leisure daily, in a systematic way, we can assure these ladies that they would find "pin money" in the results that are attainable through properly caring for a good-sized brood of even selected common poultry.

Will not the wives of our numerous farm-subscribers accept the suggestions in this brief article? We are quite certain that no one is qualified, naturally, as a domestic fowl-raiser, better than is the farmer's wife. And we know many who make it a paying thing, too, already. Women in the country should not neglect this source of ready income. The chickens, at a proper age, will always sell for double the price, dead weight, that pork, mutton or beef will bring, in the market. Eggs, fresh laid, are always in good demand, for money.

Both are economically grown, and are capital good eating, if you prefer to use them in the family, rather than sell them. Why, then, should not poultry be better cared for, generally upon the farm? And why should not the farmer's wife, his daughter, his sister, or his housekeeper, breed good fowls, and plenty of them, all over this land?—*Poultry World.*

The first year a sheep's front teeth are eight in number, and are of equal size; the second year the two middle teeth are shed, and replaced by two larger than the other; the third year two very small ones appear on either side of the eight; at the end of the fourth year there are six large teeth; the fifth year all the front teeth are large; the sixth year all begin to show signs of wear.

An act of the last legislature of New Hampshire provides for payment of a bounty of one cent per pound, or \$7,000 per annum at most, for ten years, on sugar made from beets grown in that state. Dr. H. B. Blackwell, of Portland, Me., has entered into contract with Gov-

ernor Head and the council for starting a factory before January 1st, 1882.

Raise boys early—in the morning. If they don't "raise" easily, a light dressing of peach tree fertilizer will help them wonderfully.

Catarrh Sometimes

commences with a cold, but its cure always commences with the use of Sage's Catarrh Remedy. This old, reliable, and well-known remedy has stood the test of years, and was never more popular than now.

Jersey Butter.

Jersey butter is all the fashion, and it has become so, mainly because the makers have kept up a uniform color through the year, using artificial color when necessary. Dairymen who wish to be in the fashion must use the perfected butter color made by Wells, Richardson & Co., Burlington, Vt. Hon. E. D. Mason, Pres. Dairy Assoc. says: "It gives the brightest and most perfect color to butter of any substance I have ever used. I know it to be, as you say, as harmless as salt, and it adds several cents per pound to the value of butter."

The Folly of Follies.

Many persons are accustomed to disregard all slight symptoms of disease, saying, "Let it go as it came." But when one feels the symptoms of kidney disease—such as pain in the back and loins, palpitation, urinary derangement, etc.—to neglect them is the folly of follies. Kidney, bladder, liver, and urinary complaints are always liable to end fatally if neglected. The true cure for them is Hunt's Remedy, the great kidney and liver medicine. There is no symptom or form of kidney disease that Hunt's Remedy is not master of. Sold by all druggists Trial size, 75 cents.

One Experience from Many.

"I had been sick and miserable so long and had caused my husband so much trouble and expense, no one seemed to know what ailed me, that I was completely disheartened and discouraged. In this frame of mind I got a bottle of hop bitters and used them unknown to my family. I soon began to improve and gained so fast that my husband and family thought it strange and unnatural, but when I told them what had helped me, they said 'Hurrah for Hop Bitters! long may they prosper, for they have made mother well and us happy.'—[The Mother.]

A Democrat Cured.

A leading democrat of Burlington, Mr. E. M. Sutton, speaks in the highest terms of the curative power of the celebrated kidney wort. It first cured him of a distressing kidney disease, and he now uses it whenever he has any symptoms of biliousness or needs toning up. It acts efficiently on the bowels, and cures the worst cases of piles.

Pond's Business College, Topeka, Kansas
Fall school reopens September 6, 1880, with the latest and best system known to the commercial world to teach "How to do Business." Scholarships only \$35. Send for circulars.

Womens' good Newport ties for \$1.00 at Skinner's.

"No medicine can be compared to Marsh's golden balsam for the throat and lungs. It has cured me of a lingering cough and sore lungs, after vainly using everything else."—[G. F. Thompson, Sedalia, Missouri.]
Marsh's golden balsam is for sale by every druggist in Topeka, and by prominent dealers everywhere. Large bottles 50 cents and \$1.00. Don't fail to try it.

For the cure of chills and fever, dumb ague, and all miasmatic diseases, there is nothing equal to the Marsh ague cure. It is a safe, cheap and sure remedy. Never known to fail. Price only 50 cents—liquid or pills. For sale by all druggists.

Plow Shoes

At Skinner's \$1.25, former price \$1.65.

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

ANNOUNCEMENTS.

I am a candidate for the office of Probate Judge subject to the decision of the Republican primary election.
D. A. HARVEY.

I am a candidate for re-election to the office of Probate Judge, subject to the Republican primary election.
G. W. CAREY.

PRESCRIPTION FREE

For the speedy cure of Seminal Weakness, Loss of Manhood, and all diseases brought on by indiscretion or excess. Any Druggist has the ingredients. Address DAVIDSON & CO., 78 Nassau St., N. Y.

Markets.

TOPEKA MARKETS.

Produce.	
Grocers retail price list, corrected weekly by W. W. Manpecker. Country produce quoted at buying prices.	
LETTUCE—per doz bunches.....	.25
ONIONS.....	.25
ASPARAGUS.....	.25
RADISHES.....	.25
NEW CABBAGE—per doz.....	.30 to .40
NEW BEETS.....	.30
PEAS.....	.50
BUTTER—Per lb—Choice.....	.08 to .10
CHEESE—Per lb.....	.09 to .10
EGGS—Per doz—Fresh.....	.10
BEANS—Per bu—White Navy.....	1.50
Medium.....	1.75
Common.....	1.50
NEW POTATOES—Per bu.....	.75
P. B. POTATOES—Per bu.....	.45

Butchers' Retail.	
BEEF—Sirloin Steak per lb.....	12 1/2
" Round " " ".....	10
" Roasts " " ".....	10
" Fore Quarter dressed, per lb.....	6
" Hind " " ".....	7
" By the Carcase " ".....	6 1/2
MUTTON—Chops per lb.....	10
" Roast " ".....	10 to 12 1/2
PORK.....	8 to 10
VEAL.....	12 1/2 to 15

Hides and Tallow.	
Corrected weekly by H. D. Clark, 135 Kansas Ave.	
HIDES—Green.....	.06
Green, calf.....	.07
Bull and stag.....	.04
Dry flint prime.....	.12
Dry Sacked, prime.....	.10
Dry damaged.....	.06 to .07
TALLOW.....	.06
SHEEP SKINS.....	.25 to .50

Retail Grain.

Wholesale cash prices by dealers, corrected weekly by Edson & Beck.	
WHEAT—Per bu, No. 2.....	.75
" Fall No. 3.....	.70
" Fall No. 4.....	.65
CORN—White.....	.25
" Yellow.....	.25
OATS—Per bu.....	.25
RYE—Per bu.....	.35
BARLEY—Per bu.....	.35
FLOUR—Per 100 lbs.....	2.50
" No. 2.....	2.75
" No. 3.....	2.50
" No. 4.....	2.25
CORN MEAL.....	.65
CORN CHOP.....	.65
CORN & OATS.....	1.25
RYE CHOP.....	.50
BRAN.....	.50
SHORTS.....	.60

Poultry and Game.

Corrected weekly by McKay Bros., 294 and 92 Kansas Avenue.

CHICKENS—Live, per doz..... 2.00 to 2.25

Chicago Wool Market.

Tub washed bright 45 to 46¢ per lb; do dingy and coarse 40 to 42¢; fleece washed medium 40 to 42¢; do fine 36 to 40¢; do coarse 35 to 37¢; unwashed medium 27 to 30¢; do coarse 20 to 25¢; do fine bright 24 to 26¢; do heavy 17 to 22¢; bucks' fleece 16 to 18¢. Consignments from western Iowa, Nebraska and Kansas sell at about 2¢ per lb less than this range, and burry and poor condition lots at 3 to 5 cents less. Colorado wool (unsorted) is quoted at 25 to 28¢ per lb for medium to fine; at 22 to 24¢ for coarse to medium; at 22 to 24¢ for black.

St. Louis Wool Market.

Tub-washed—medium 43 to 45¢, No. 2, 40 to 43, low and dingy 35 to 38; Unwashed—medium 29 to 31, fair do 28, low or coarse and dark do 24 to 26, medium combing 20 to 23¢, low do 24 to 26, heavy merino 20 to 23, light do 23 to 25¢, burry black and cotted ranges from 5 to 15¢ per lb less.

Markets by Telegraph, July 14.

New York Money Market.

MONEY—2 to 3 per cent.	
GOVERNMENT BONDS.	
Coupons of 1881.....	109 3/4
Nov 5's.....	109 1/2
Nov 4 1/2's (registered).....	109 1/2
Nov 4 1/2's.....	109 1/2 to 110
Coupons.....	108 1/2

SECURITIES.

PACIFIC SIXES—95 to 125.	
MISSOURI SIXES—95 to 105.	
U. S. BONDS—95 to 112.	
C. P. BONDS—95 to 112.	
SINKING FUNDS—95 to 112.	

Chicago Live Stock Market.

HOGS—Receipts, 23,000; shipments, 5,000; market opened strong, ruled steady; pigs cleared; mixed pack 41 to 42¢; choice heavy, \$4.60 to 4.75.
CATTLE—Receipts, 3,500; shipments, 2,000; common to good, \$4.20 to 4.25; wintered Texans, \$3.00 to 3.40; native butchers, slow; grass Texans, full supply, all sold, \$1.50 to 3.40; mainly, \$2.70 to 2.90; corn fed westerns, \$3.75 to 4.20.
SHEEP—Receipts, 7,000; firm and active; lambs, \$2.50 sheep \$5.50 to 4.35.

Chicago Produce Market.

WHEAT—Unsettled but generally higher; No. 2 red 90¢; No. 2 spring, 91 to 93¢; cash and July; 90¢; No. 2 hard, 88 to 89¢; September, No. 3 spring, 82 to 83¢; rejected, 61 to 67¢.
CORN—Unsettled but generally lower; 35 1/2 to 35¢; No. 2, 35 1/2 to 36¢; September, rejected, 33¢.
OATS—Active and firm; 25 1/2¢, cash; 25 1/4¢ August and September.
RYE—Steady; 63¢.
EGGS—Active; 50¢ to 50¢.
PORK—Strong and higher; \$13.25 to 13.75 cash; \$14.50 to 14 1/2¢ asked July; \$14 02 1/2 to 14 05, September.
LARD—Strong and higher; \$6.82 1/2 to 6.83 cash; \$6.85 to 6.87 1/2, August; \$6.90 to 6.92 1/2, September.
BULK MEATS—Stronger; shoulders, \$4.40; short ribs, \$7.15; short clear, \$7.40.

Kansas City Produce Market.

WHEAT—Receipts, 11,715 bushels; shipments, 6,612 bushels; in store 62,650 bushels; market unsettled; No. 2, 88 to 89¢; No. 3, 87 to 88¢; No. 4, 86 to 87¢.
CORN—Receipts, 4,000 bushels; shipments, 1,542 bushels; in store, 66,104 bushels; market steady; No. 2 mixed, 26 1/2 to 27¢; No. 2 white mixed, 29 1/4 to 29 1/2¢.
OATS—Active and firm; 25 1/2¢, cash; 25 1/4¢ August and September.
RYE—Nominal.
EGGS—Market dull at 6¢ per dozen.
BUTTER—Market steady and unchanged.

St. Louis Produce Market.

WHEAT—Unsettled.
WHEAT—Opened lower, advanced, then declined; No. 2 red, 91 1/2 to 92¢; cash and July; 91 1/2 to 92¢; No. 2 hard, 88 to 89¢; September, No. 3 spring, 82 to 83¢; rejected, 61 to 67¢.
CORN—Unsettled but generally lower; 35 1/2 to 35¢; No. 2, 35 1/2 to 36¢; September, rejected, 33¢.
OATS—Active and firm; 25 1/2¢, cash; 25 1/4¢ August and September.
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BULK MEATS—Stronger; shoulders, \$4.40; short ribs, \$7.15; short clear, \$7.40.

St. Louis Live Stock Market.

HOGS—Active and higher; Yorkers and Baltimores, \$4.40 to 4.50; packing 4.40 to 4.50; butchers to select, \$4.55 to 4.65; receipts, 5,700; shipments, 1,700.
CATTLE—Native slow, buyers demanded concessions and obtained them on shipping grades; choice heavy steers, \$4.60 to 4.70; prime, \$4.30 to 4.50; light to fair, \$3.80 to 4.30; native grass steers, \$3.00 to \$3.75; native butchers' stuff, in fair supply, weak and slow; five butchers' steers, in fair supply, ranging at \$2.90 to 3.05; Indian steers in light supply and demand; receipts, 3,000; shipments, 400.
SHEEP—Active, prices steady; \$3.00 to 4.00 for fair to choice medium; receipts, 250; shipments, 650.

Kansas City Live Stock Market.

CATTLE—Receipts, for 45 hours, 1,771; shipments, 750; market for active; demand for stockers and feeders good; native steers averaging 1,350 lbs. sold at 82 1/2 to 83 1/2¢; No. 2, 82 to 83¢; No. 3, 81 to 82¢; No. 4, 80 to 81¢; No. 5, 79 to 80¢; No. 6, 78 to 79¢; No. 7, 77 to 78¢; No. 8, 76 to 77¢; No. 9, 75 to 76¢; No. 10, 74 to 75¢; No. 11, 73 to 74¢; No. 12, 72 to 73¢; No. 13, 71 to 72¢; No. 14, 70 to 71¢; No. 15, 69 to 70¢; No. 16, 68 to 69¢; No. 17, 67 to 68¢; No. 18, 66 to 67¢; No. 19, 65 to 66¢; No. 20, 64 to 65¢; No. 21, 63 to 64¢; No. 22, 62 to 63¢; No. 23, 61 to 62¢; No. 24, 60 to 61¢; No. 25, 59 to 60¢; No. 26, 58 to 59¢; No. 27, 57 to 58¢; No. 28, 56 to 57¢; No. 29, 55 to 56¢; No. 30, 54 to 55¢; No. 31, 53 to 54¢; No. 32, 52 to 53¢; No. 33, 51 to 52¢; No. 34, 50 to 51¢; No. 35, 49 to 50¢; No. 36, 48 to 49¢; No. 37, 47 to 48¢; No. 38, 46 to 47¢; No. 39, 45 to 46¢; No. 40, 44 to 45¢; No. 41, 43 to 44¢; No. 42, 42 to 43¢; No. 43, 41 to 42¢; No. 44, 40 to 41¢; No. 45, 39 to 40¢; No. 46, 38 to 39¢; No. 47, 37 to 38¢; No. 48, 36 to 37¢; No. 49, 35 to 36¢; No. 50, 34 to 35¢; No. 51, 33 to 34¢; No. 52, 32 to 33¢; No. 53, 31 to 32¢; No. 54, 30 to 31¢; No. 55, 29 to 30¢; No. 56, 28 to 29¢; No. 57, 27 to 28¢; No. 58, 26 to 27¢; No. 59, 25 to 26¢; No. 60, 24 to 25¢; No. 61, 23 to 24¢; No. 62, 22 to 23¢; No. 63, 21 to 22¢; No. 64, 20 to 21¢; No. 65, 19 to 20¢; No. 66, 18 to 19¢; No. 67, 17 to 18¢; No. 68, 16 to 17¢; No. 69, 15 to 16¢; No. 70, 14 to 15¢; No. 71, 13 to 14¢; No. 72, 12 to 13¢; No. 73, 11 to 12¢; No. 74, 10 to 11¢; No. 75, 9 to 10¢; No. 76, 8 to 9¢; No. 77, 7 to 8¢; No. 78, 6 to 7¢; No. 79, 5 to 6¢; No. 80, 4 to 5¢; No. 81, 3 to 4¢; No. 82, 2 to 3¢; No. 83, 1 to 2¢; No. 84, 0 to 1¢; No. 85, 0 to 1¢; No. 86, 0 to 1¢; No. 87, 0 to 1¢; No. 88, 0 to 1¢; No. 89, 0 to 1¢; No. 90, 0 to 1¢; No. 91, 0 to 1¢; No. 92, 0 to 1¢; No. 93, 0 to 1¢; No. 94, 0 to 1¢; No. 95, 0 to 1¢; No. 96, 0 to 1¢; No. 97, 0 to 1¢; No. 98, 0 to 1¢; No. 99, 0 to 1¢; No. 100, 0 to 1¢.

Liverpool Market.

BREADSTUFFS—Market quiet.
FLOUR—10s to 12s.
WHEAT—Winter, 9s 2d to 9s 10d spring 8s 6d to 9s 6d.
CORN—New, 4s 10d.
CHEESE—5s 4d.
OATS—6s 6d.
PORK—6s 6d.
BEEF—6s 6d.
BACON—Long clear middles, 5s 6d; short clear middles, 5s 6d.
LARD—Cvt, 37s.
TALLOW—Good to fine, 3s 6d. P. Y. C. London, 4/6.

Denver Market.

FLOUR, GRAIN AND HAY.
HAY—Upland, 24 to 25¢; second bottom, 21 to 22¢; bottom hay, 19 to 20¢.
FLOUR—Colorado, 3 40 to 3 45; Graham, 3 00 to 3 25.
MEAL—Bolted corn meal, 2 00.
WHEAT—2 00 to 2 20¢ cwt.
CORN—1 35 to 1 40¢ cwt.
OATS—Colorado, 2 00 to 2 25¢; state, 1 55 to 2 00¢ cwt.
BARLEY—1 75 to 1 85¢ cwt.
PRODUCE, POULTRY VEGETABLES:
EGGS—Per dozen, ranch 15 to 17¢; state, 12 to 14¢.
BUTTER—Ranch, 9¢; 35 to 36¢; creamery, 30 to 35¢; poor, 8 to 15¢.
ONIONS—5 to 5 1/2¢; eastern, 2 00 to 2 50¢ cwt.
TURKEYS—Dressed, 15 to 16¢; live, 16 to 17¢.
CHICKENS—Dressed, 15 to 16¢; live, 16 to 17¢; do 4 00 to 5 00.

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.

THE KANSAS FARMER.

Now in its 18th year.

Published at Topeka, Kansas, every Wednesday, by E. E. Ewing.

Literary and Domestic

The Shower.

Miles and miles and to the east away,
So far that it seems like a shadowy gray,
The mountain stands in the distance dim,
And down its sides like a spectre grim,
The shower came creeping on.

There are flecks of foam on the darkening river,
The willows beside it bend and shiver,
As the storm comes down like a thing of dread,
And the lightning weaves its fiery thread
Through the clouds as they darkly fall.

Fainter and fainter the robins call;
Faster and faster the rain-drops fall,
Till they hang in a silvery fringe from the eaves;
And the wind, as it stirs the locust-trees,
Sends a shower of blossoms down.

Then the wind drops with a sudden hush,
The clouds fall back, and the rain drops bluish,
As, shook from the clouds the sun has risen,
They catch a gleam from the opening heaven,
And fall in a ladder of light.

Then the birds sing loud a chorus of song,
The river leaps with a laugh along;
Greener and greener the grasses grow,
Under their cover of blossoming snow,
Shook from the locust-trees.

And my heart keeps time, for a little hour,
To the new life born of the summer shower;
My blinded eyes have been touched with clay,
And through the clouds, as they break away,
I see the light of heaven.

Facts—Curious, Scientific, and Historical.

St. Peter's cathedral will hold 54,000 people.
The diameter of the dome of the capitol at Washington is 124½ feet.
Astronomy is the oldest science. It began in Chaldea.

Copper plate printing was invented in Florence in the fifteenth century.

Saxon ships, at the beginning of the ninth century, were only large boats with one mast.

Cyprus manufactures the incombustible mineral cloth, the asbestos of the ancients.

The first edition of *Paradise Lost* in quarto was sold at seventy-five cents, in plain binding.

Ancient poets thought that aperient medicines, as salts, improved the fancy and vigor of the mind.

The mean weight of the human skeleton is 17 pounds, of the male 17.5 and the female 15.8 pounds.

The slope of rivers flowing into the Mississippi from the east is about three inches per mile, and from the west six inches.

Pedro the Cruel, of Castile, was one of the first kings who could write. Henry Beauclerc always signed with a mark.

Morpheus, the name of the god of sleep, means maker or fashioner, and was given to him because he makes or moulds the dreams of the slumberer.

The *Daily Courant*, the first English daily paper, commenced March 11, 1702, by E. Mallet, against the Ditch at Fleet Bridge. It was a single page of two columns and gave only foreign news.

In the reign of Edward IV it was enacted that every Englishman should own a bow of his own height, and should keep it for his own use and for his sons' practicing from the time that they were seven years old.

King John, of England, was very fond of sugar plums, and one of the most costly items among his expenditures was for sugar and spices. His sugar plums, flavored with rose and dyed with cochineal, cost him three shillings a pound.

An Esquimaux boy, supplied by Capt. Parry, ate in one day 10½ pounds of solid food, and drank of various liquids 1½ gallons. A man of the same nation ate 10 pounds of solids, including two candles, and drank 1½ gallons, yet they were only 4 to 4½ feet high.

A royal decree of Louis XIV, dated 1662, authorized the establishment of twopenny-half-penny omnibuses, but, odd as it may seem, they were unsuccessful. The aristocracy took possession of them for a long time, and when they ceased to be fashionable the poor would not use them. They did not reappear until 1827.

Governor's Island receives its name from the fact that it was owned by Wouter Van Twiller, the second Dutch governor of Nieuw Nederland, who bought it from the Indians. It had previously been known as "Pagganck," or Nut Island.

The first steam engine was set in motion in Germany, on August 25, 1785. Harkort established the first engineering works in that country, at Freiheit-Wetter, in 1819. He induced English workmen to go to Wetter, and they taught the German apprentices.

Alcohol was invented 950 years ago in Arabia, and was used by ladies with a powder for painting their faces. Since that time it has been used mainly by gentlemen for painting their noses, and used in a plain state because they required no powder to fire them off.

General T. J. Jackson received his sobriquet of "Stonewall" from an incident that occurred during the late rebellion. As the rebel forces were forming to meet the advancing Union troops, Jackson was asked, respecting a certain corps, if he was not afraid his men would run. "Run? No," he said; "they will stand like a stone wall."

During the reign of Charles I, patents were issued for "the manufacture of copper farthings," for "the sole making of steel," for "rendering sea coal and pit coal as useful as charcoal, without offensive smell or smoke," for "the sole making of stone pots, jugs and bottles," for "plowing land without horses or oxen," and for "making mills to grind without the help of horses, wind or water." All the holders of these patents paid a certain sum to the royal exchequer, and people embarked their

money in the projects thus launched with the royal sanction, and when they lost their wealth they lost their loyalty also.

Saving Seeds.

There is no general rule to be laid down in the management of seeds, but the details must be learned by experience, as each variety requires a special treatment. When I first began in the seed business I wasted a great deal of precious time, from not knowing how to manage. For example we saved our Petunia and Portulaca seeds by picking a single pod at a time with thumb and finger, and I paid fifteen dollars for saving four ounces of choice Petunia in this way; now I grow the same seed at a profit, at five dollars a pound. The lady in question asked particularly about Pansy seed.

The Pansy belongs to the class of plants which scatter their own seeds, and to save the seeds they must be gathered quite green, for as soon as the pods turn yellow they burst open and throw the seeds quite a distance. A single row will seed a strip nearly ten feet wide, and as they are hardy they will come up in autumn, live over winter, and blossom early in the spring. Phlox is another of the plants that throws its seeds by the bursting of the pods, and after many experiments I have adopted the rule of watching, and when there is a fair amount of ripe seed, I pull it up by the roots and spread it on a large sheet in a warm garret. In this way, with but little trouble and expense, we save a part of the crop and find it much better to plant more land than to try to save all the seed by repeated hand pickings.

Petunia and Portulaca we manage in the same way, except that we cut the Portulaca and let it grow up for a second crop. Verbena must be hand picked, going over the beds twice a week for several weeks. Its seeds grow on long stems something like wheat heads, and the seed at the base is ripe and beginning to waste before those at the point are fairly formed, so that we only save a part of the seed. There are other varieties of seed which belong to the "wind dispersed" family, which come out like the dandelion, with a feathery attachment on which they will be wafted away if neglected, and these must be gathered every day. The *Cacalia* and some of the *Everlastings*, are among flowers, and the *Salsify* among vegetables. The size of a plant is no index of the size or shape of the seed, and it is a curious study to compare the seeds of different plants. A large coarse plant will often have a seed as fine and delicate as sifted sand, and a small delicate plant at its side, a coarse, large seed. For example, the Foxglove, a plant of ten growing five feet high, with large leaves and great spikes of flowers, has a seed so small that a single one can scarcely be discerned by the naked eye, while the *Nasturtium*, a delicate vine, has a seed resembling a half-grown nutmeg.

Among trees we find the same contrast, the seed of the Catalpa being lighter than parsnip seed, while all are familiar with the large Burr Oak and Black Walnut. Again, some seeds are almost as hard as pebbles; for example, the Honey Locust and Coffee-nut. In handling our ordinary vegetable seeds a good deal of knowledge is required. The cucumber, tomato and some others must stand in their juice and sour before they can be cleaned so as to present a bright and handsome appearance, and each variety must have its own peculiar treatment which the seedsmen learn by long experience. I have had three hundred bushels of ripe cucumbers in a pile, and to cut them, if one did not know how, would be both a serious and dangerous matter, for the liquid contents of a ripe cucumber is like the white of an egg, and as slippery as an eel. But with a sloping spout securely fixed to an open barrel and a small, sharp knife blade stuck an inch and a half through from below, the operator has the use of both hands and can quickly and safely open his cucumbers.

When it comes to saving pepper seed, we put a half bushel or so in a barrel and chop them with a spade until with water we can wash out all the pepper, and leave the seed at the bottom. Some varieties of seed, such as beet, parsnip and carrot, are threshed by a machine. I have seen 2,000 bushels of a single variety of beet in a pile on the floor of one of the large curing houses. Perhaps a few of our readers have ever thought what an immense business the seed trade of the United States is, but when we remember that outside of our large cities, every family uses more or less seeds, it will be seen that the aggregate of the business is enormous. If I could have a monopoly of the trade of a single state in one variety of seed alone, such as radish, beet or lettuce, at five cents per paper, it would enable me to spend a summer in Europe. Every seedsmen is ambitious to improve old, or establish new varieties of vegetables, and there is perhaps no business carried on in which greater pains is taken to improve. Some varieties of seed retain their vitality for many years, while others are worthless the second year, and constant care and watchfulness is necessary to see that the seeds sold are fresh and true to name.—Waldo F. Brown, in *Ohio Farmer*.

How to Observe Sunday.

The question of the proper observance of Sunday has been a much disputed one, and is one of much interest. A certain amount of religious exercises should of course form a part of each Sunday's life; should indeed be its central idea, but it should not infringe upon the demands of overworked nature for rest. But what is rest? Clearly what would be rest for one would not be for another. What would increase vitality and strength to the day laborer would make the weary student, book-keeper or editor more

weary. The work of the six week days, whatever it is should be put entirely out of sight from Sunday until Monday. Mental labor—reading and writing or other employment that requires mental effort. Physical laborers must cease physical labor, and can obtain the desired rest in mental improvement. Those whose week days are spent within the walls of a store or an office, should be in the open air, in the broad fields, where they can breathe nature's purest aerial draught, as much as possible. It should be made enjoyable, especially for the children, that they may grow up with the love of the day. Instead of an aversion for it, as is too common even in the best of Christian families. The observance of the day in each household should be made a study, that the most profitable and rest-giving enjoyments to suit each case may be found, and then let the observance of the day, once settled, be lived up to as strictly as a business transaction. The day should have its distinctive features; religious culture; freedom from toil for servant as well as master; rest in its true sense, and enjoyment of the higher order, which relaxes the nervous system, and is one of nature's greatest restoratives. All have their place and none of them should be neglected.

The Same Old Game.

The other afternoon the tools, implements, fixtures, appurtenances, and whatever else belongs to the game of croquet, were put in position on a lawn up Woodward avenue, and as a young lady and a young man, who seemed to be her lover, took up the mallets to start the balls, a bony-looking old tramp halted and leaned on the fence and got his mouth puckered up for something good. The young man took the first shot, and before the ball ceased rolling the girl's voice was heard calling:

"You don't knock fair—you've got to try it over!"

Before either of them were half way down she had occasion to remind him that he wasn't playing with a blind person, and that she could overlook no cheating. As she went under the last arch he felt compelled to remark that her playing would rule her out of any club he ever heard of. On the way back she asked him why he couldn't be the best and not a jockey and a falsifier, and he inquired why she didn't write a set of rules to tally with her style of playing.

"It's coming—'taint five minutes old!" chuckled the tramp, as he took a new grip on the fence and shaded his eyes with his hat.

"Don't you knock that ball away!" shouted the girl a minute after.

"Yes I will!"

"Don't you dare to!"

"I am playing according to rules."

"No, you aren't! You've cheated all the way through!"

"I never cheated once!"

"And now you are adding the crime of perjury! Sir, I dare not entrust my future happiness to such a man! I could never trust or believe in you!"

"Nor I in you!"

"Then let us part forever!" she hurled her mallet at a stone dog.

"So we will!" he hissed, as he flung his at her sleeping poodle.

She bowed and started for the house to pack up his letters.

He raised his hat and made for an approaching street-car to get down town in time for the Toledo train.

"That's all I want to know," sighed the tramp as he turned away; "I've been out in the woods for some years past, and didn't know but there had been some changes made in croquet, but I see it's the same old game clear through."

Flowers on the Table.

Set flowers on your table—a whole nose-gay if you can get it, or but two or three of a single flower—a rose, a pink, a daisy, and you have something that reminds you of God's creation, and gives a link with the poets that have done it most honor. Flowers on the morning table are especially suited to them. They look like the happy wakening of the creation; they bring the perfume of the breath of nature into your room; they seem the very representative and embodiment of every smile of your home, the graces of good morrow; proof that some intellectual beauties are in ourselves or those about us, some Aurora (if we are so lucky as to have such a companion) helping to strew our life with sweetness, or in ourselves some masculine wildness not unworthy to possess such a companion or unlikely to gain her.—Leigh Hunt.

Recipes.

A lady furnishes the *Ohio Farmer* the three following useful recipes, for making hard soap, canning fruit and beef.

HARD SOAP.

Take of sal soda 12 lbs., unslacked white lime 6 lbs., clear grease 12 lbs.; put lime and sal soda in a brass or copper kettle, add 8 gallons of rain water; let come to a boil, stirring occasionally; when all is dissolved pour into jars to settle; when clear, weigh grease, put in the same kettle, carefully dip off the lye, and put all on to boil; boil until thick, which will take from two to four hours, then pour into a tight box or tub to cool, then cut out any desired shape. As the season of the year is at hand for

CANNING FRUIT.

I will give the plan I have been pursuing for several years and find it so good that I shall continue until I find a better way. Place your already prepared fruit (if berries or cherries, carefully pick them as you would if you were

going to put them on to stew) in your stone fruit cans, cold; have your teakettle of boiling water, and for grapes, cherries, and all acid fruits use sugar, for the fruit keeps better and is in every way superior. Fill your cans with syrup until within an inch and a half of the top, place immediately in the hot oven, and when they come to the boil they are ready to take out and seal up; after you have passed a knife or spoon two or three times down into the can to let out the remaining air bubbles, seal air tight, and you will be surprised and delighted to find your fruit whole and of fine flavor when you come to use it.

CANNING BEEF.

I began canning my beef the next day after it was butchered; boiled it the same day as if I were going to eat it immediately, and filled it in the hot cans and sealed air tight, then set in a cool cellar until needed for use.

GRAPE JAM.

Stem good ripe grapes and weigh them; push the pulp from the skins, cook it in a porcelain saucepan until the seeds separate from it then strain them out. Meantime put the skins, with the juice and a little water in another saucepan and boil them until tender, after which add the strained pulp and cook fifteen minutes longer. Put in a scant three-quarters of a pound of sugar for every pound of fruit, let boil up once and seal up tight in glass jars. Always remember in putting up grapes that the principal cooking should be done before adding the sugar, otherwise the skins will be tough, the flavor less delicate, and the syrup very liable to be filled with the little stony crystals that are so frequently found in grape jam and jelly.

Freckles.

The following remedies are recommended for freckles. Have them prepared by a druggist: Dissolve one ounce of Venice soap in half an ounce of lemon juice; add a quarter of an ounce each of oil of bitter almonds and of oil of oil of tartar. Place the mixture in the sun until it acquires the consistency of ointment; then add three drops of oil of rhodium, and keep it for use. At night bathe the parts with elder flower water (also to be had of the druggist), and apply the ointment. In the morning cleanse the skin from the oily adhesion, and wash with rose water. A weak solution of nitre will sometimes remove freckles and tan, but it must not be applied too often.

A simpler remedy is muric acid of ammonia, half a drachm, lavender water, two drachms; distilled water, half a pint. Apply with a sponge two or three times a day. Lemon juice and buttermilk are sometimes efficient.

Things Useful and Ornamental.

The Boston *Globe* recently gave two new designs for work-bag and hair-receiver. The work-bag can be made any size desired. Take a large box-cover for the foundation, cover one side of it with paper muslin; then make for the outside alternate strips of puffed satin and Java canvas work with floss. Fasten it on the cardboard and bend it in shape to form the bag. Then at the ends make a puff of satin and a ruffle at the top with a drawing string or elastic. The handles are of wide satin ribbon finished at the ends with large, full bows.

The foundation of the hair-receiver is a large, tin drinking-cup. The cup is covered with Java canvas, and worked in cross-stitch, or any design the writer may prefer. Draw the canvas tightly over the cup, first turning in the edges. The top is made of satin and drawn up with a cord and tassel. The handle on both sides is covered with the canvas, and bound or button-hole stitched together at the edges. Finish top and bottom with a bow of satin ribbon. BRAMBLEBUSH.

Mr. Goober—as the story goes—lived in the Mormon country. He had but one wife, and never thought of taking any more till one day an elder told him it was his religious duty to seal unto himself a few others. Mr. Goober went home and sadly informed his wife of what the elder had said, and Mrs. Goober, said she had no objection provided the elder would come round and argue the case with her piously. Goober told the elder, and the elder dropped around. He smiled sweetly at Mrs. Goober advanced to meet him. The next thing he knew he was skipping around the room with his coat slit up the back, and his hat knocked into pi, while Mrs. Goober wielded the broomstick. He finally jumped out of a window, and escaped with his life, a sadder and a wiser man. The next time he met Goober he told him he had had a celestial revelation by which Goober was relieved from the necessity of taking any more wives—Mrs. Goober would count for almost a thousand in the New Jerusalem.

DEGENERATION OF POTATOES.—These "die out" occasionally, and new varieties have to be raised to take their places. They die from enervation, and not because varieties "naturally" wear out. Plants are often injured by insects or disease, and mature before the tubers are "ripe." Such "seed" produces inferior plants. Wherever the potato plant lives to flower freely, and not die away before its time, its tubers will produce plants again showing no signs of wearing out.

The Russian method of serving tea is a pleasant variation from the usual way; a slice of lemon and about a teaspoonful of lemon juice is added to each cup; no milk is used, but sugar to suit the taste. By many, the lemon is considered a great addition, giving a new and delightful flavor.

The late variety of young men (those who keep your daughters up until 3 a. m.) should be raised rapidly—out of the front door.

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*.

62 Golden Chrome, Crystal, Rose, Damask, Navy, &c. Same in gold and jet sets, Winslow & Co., Meriden, Ct.

\$777 A YEAR and expenses to agents. Oufit Free. Address P. O. VICKERY, Augusta, Maine.

50 New Style Cards, Lithographed in bright colors, 10c. 60 Ag's Samples 10c. Coun, Card Co., Northford, Ct.

\$77 A Month and expenses guaranteed to Agent. Oufit free. Shaw & Co., Augusta, Maine.

52 Gold, crystal, lace, perfumed & chromo cards, 10c. name in gold & jet 10c. Clinton Bros., Clintonville, Ct.

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. Ag's Oufit, 10c. CONN CARD CO., Northford, 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.

20 Gold and Silver Chromo Cards, with name, 10c. post paid. G. I. REED & Co., Nassau, N. Y.

ELEGANT AUTOGRAPH ALBUM, gilt covers, 48 pages, illustrated with birds, scrolls, etc. in colors, and 47 Select Quotations, 15c. Agent's outfit for cards, (over 60 samples), 10c. Davids & Co., Northford, Ct.

50 Chromo, Tortoise Shell, Cupid, Motto, Floral cards, 10c. outfit 10c. Hall Bros., Northford, Ct.

50 Gold, Chromo, Tortoise Shell, Marble and Bow CARDS, 10c. SEAVY BROS., Northford, Ct.

AGENTS WANTED for the richly illustrated and only complete and authentic history of the great world of

GRANT AROUND THE WORLD

It describes Royal Palaces, Rare Curiosities, Wealth and wonders of the Indies, China, Japan, etc. A million people want it. This is the best chance of your life to make money. Beware of "catch-penny" imitations. Send for circulars and extra terms to agents. Address NATIONAL PUBLISHING CO., St. Louis, Mo.

AGENTS WANTED. A Library in One Volume.

A Book for the American Farmer and Stock Grower.

Manning's Illustrated Stock Doctor.

A live stock encyclopedia, including horses, cattle, sheep, swine and poultry, with all the facts concerning the various breeds, their characteristics, breeding, training, sheltering, feeding, selling, profitable use and general care. 400 illustrations and two charts illustrating the ages of horses and cattle. Send for circulars, terms, &c., to

THOMAS PROTHRO, Emporia, Kansas.

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

Breeder & Shipper.

EGGS FOR HATCHING In Season.

Send for Illustrated Catalogue, Free.

Pianos--Organs.

CHEAPEST HOUSE IN AMERICA. 1st-class instruments, all new, for cash or installments; warranted 6 years. Illustrated catalogues free. Agents wanted. T. LEEDS WATERS, Agt., 28 West 14th st., New York

Rent paid two-and-a-quarter years. Says one.

MASON AND HAMLIN ORGANS

BEST CABINET OR PIANO ORGANS IN THE WORLD. winners of highest distinction at every world's fair for thirteen years. Prices, \$1, \$1.50, \$2, \$2.50, \$3, \$3.50, \$4, \$4.50, \$5, \$5.50, \$6, \$6.50, \$7, \$7.50, \$8, \$8.50, \$9, \$9.50, \$10, \$10.50, \$11, \$11.50, \$12, \$12.50, \$13, \$13.50, \$14, \$14.50, \$15, \$15.50, \$16, \$16.50, \$17, \$17.50, \$18, \$18.50, \$19, \$19.50, \$20, \$20.50, \$21, \$21.50, \$22, \$22.50, \$23, \$23.50, \$24, \$24.50, \$25, \$25.50, \$26, \$26.50, \$27, \$27.50, \$28, \$28.50, \$29, \$29.50, \$30, \$30.50, \$31, \$31.50, \$32, \$32.50, \$33, \$33.50, \$34, \$34.50, \$35, \$35.50, \$36, \$36.50, \$37, \$37.50, \$38, \$38.50, \$39, \$39.50, \$40, \$40.50, \$41, \$41.50, \$42, \$42.50, \$43, \$43.50, \$44, \$44.50, \$45, \$45.50, \$46, \$46.50, \$47, \$47.50, \$48, \$48.50, \$49, \$49.50, \$50, \$50.50, \$51, \$51.50, \$52, \$52.50, \$53, \$53.50, \$54, \$54.50, \$55, \$55.50, \$56, \$56.50, \$57, \$57.50, \$58, \$58.50, \$59, \$59.50, \$60, \$60.50, \$61, \$61.50, \$62, \$62.50, \$63, \$63.50, \$64, \$64.50, \$65, \$65.50, \$66, \$66.50, \$67, \$67.50, \$68, \$68.50, \$69, \$69.50, \$70, \$70.50, \$71, \$71.50, \$72, \$72.50, \$73, \$73.50, \$74, \$74.50, \$75, \$75.50, \$76, \$76.50, \$77, \$77.50, \$78, \$78.50, \$79, \$79.50, \$80, \$80.50, \$81, \$81.50, \$82, \$82.50, \$83, \$83.50, \$84, \$84.50, \$85, \$85.50, \$86, \$86.50, \$87, \$87.50, \$88, \$88.50, \$89, \$89.50, \$90, \$90.50, \$91, \$91.50, \$92, \$92.50, \$93, \$93.50, \$94, \$94.50, \$95, \$95.50, \$96, \$96.50, \$97, \$97.50, \$98, \$98.50, \$99, \$99.50, \$100, \$100.50, \$101, \$101.50, \$102, \$102.50, \$103, \$103.50, \$104, \$104.50, \$105, \$105.50, \$106, \$106.50, \$107, \$107.50, \$108, \$108.50, \$109, \$109.50, \$110, \$110.50, \$111, \$111.50, \$112, \$112.50, \$113, \$113.50, \$114, \$114.50, \$115, \$115.50, \$116, \$116.50, \$117, \$117.50, \$118, \$118.50, \$119, \$119.50, \$120, \$120.50, \$121, \$121.50, \$122, \$122.50, \$123, \$123.50, \$124, \$124.50, \$125, \$125.50, \$126, \$126.50, \$127, \$127.50, \$128, \$128.50, \$129, \$129.50, \$130, \$130.50, \$131, \$131.50, \$132, \$132.50, \$133, \$133.50, \$134, \$134.50, \$135, \$135.50, \$136, \$136.50, \$137, \$137.50, \$138, \$138.50, \$139, \$139.50, \$140, \$140.50, \$141, \$141.50, \$142, \$142.50, \$143, \$143.50, \$144, \$144.50, \$145, \$145.50, \$146, \$146.50, \$147, \$147.50, \$148, \$148.50, \$149, \$149.50, \$150, \$150.50, \$151, \$151.50, \$152, \$152.50, \$153, \$153.50, \$154, \$154.50, \$155, \$155.50, \$156, \$156.50, \$157, \$157.50, \$158, \$158.50, \$159, \$159.50, \$160, \$160.50, \$161, \$161.50, \$162, \$162.50, \$163, \$163.50, \$164, \$164.50, \$165, \$165.50, \$166, \$166.50, \$167, \$167.50, \$168, \$168.50, \$169, \$169.50, \$170, \$170.50, \$171, \$171.50, \$172, \$172.50, \$173, \$173.50, \$174, \$174.50, \$175, \$175.50, \$176, \$176.50, \$177, \$177.50, \$178, \$178.50, \$179, \$179.50, \$180, \$180.50, \$181, \$181.50, \$182, \$182.50, \$183, \$183.50, \$184, \$184.50, \$185, \$185.50, \$186, \$186.50, \$187, \$187.50, \$188, \$188.50, \$189, \$189.50, \$190, \$190.50, \$191, \$191.50, \$192, \$192.50, \$193, \$193.50, \$194, \$194.50, \$195, \$195.50, \$196, \$196.50, \$197, \$197.50, \$198, \$198.50, \$199, \$199.50, \$200, \$200.50, \$201, \$201.50, \$202, \$202.50, \$203, \$203.50, \$204, \$204.50, \$205, \$205.50, \$206, \$206.50, \$20

THE STRAY LIST.

HOW TO POST A STRAY.

BY AN ACT of the Legislature, approved Feb 27, 1866, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required within ten days after receiving a certified description and appraisal, to send by mail, notice containing a complete description of said strays, the day on which they were taken up, their appraised value, and the name and residence of the taker up, to the KANSAS FARMER, together with the sum of fifty cents for each animal contained in said notice.

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

Broken animals can be taken up at any time in the year.

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

In persons, except citizens and householders, can take up a stray.

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

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

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

The Justice of the Peace shall within twenty days from the time such stray was taken up, (ten days after posting) make out and return to the County Clerk, a certified copy of the description and value of such stray.

If such stray shall be valued at more than ten dollars, it shall be advertised in the KANSAS FARMER in three successive numbers.

The owner of any stray, may within twelve months from the time of taking up, prove the same by evidence before any Justice of the Peace of the county, having first notified the taker-up of the time when, and the Justice before whom proof will be offered, on or before the day of the proof, the owner, on the order of the Justice, and upon the payment of 1 charge and costs.

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

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

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

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

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

Strays for the week ending July 14.

Douglas county—N. O. Stevens, clerk.

MARE—Taken up May 10, 1880, by Oliver Butler, Eudora, one light bay mare 2 years old, valued at \$35.

Franklin county—A. H. Sellers, clerk.

MARE—Taken up June 4, 1880, by Henry Farnum, Harrison, one light sorrel mare, one white foot, star in forehead, no other marks or brands perceivable, about 4 years old, valued at \$40.

Harvey county—J. C. Johnston, clerk.

MARE—Taken up by Stannis Noel, Halstead, June 10, 1880, one bay mare, 14 hands high, blind in right eye, valued at \$20.

Hodgman county—clerk.

MARE—Taken up June 6, 1880, by Michael Coffman, one dark sorrel mare, 12 or 15 years old, white spot in face, front feet grown out long, left side bulged out, plain harness and saddle marks, no brands, valued at \$15.

Wabunsee county—T. N. Watts, clerk.

MARE—Taken up by Wm. Brewer, Rock Creek, one chestnut sorrel mare, 14 hands high, 14 years old, star in forehead, white on left hind leg, collar marks, valued at \$20.

STEER—Taken up by Wm. Exon, Rock Creek, one horn steer, about 2 years old, white spot in forehead, red legs and neck, crop and split in right ear, appearance of slit in left, valued at \$20.

Wyandott county—D. B. Emmons, clerk.

MARE—Taken up June 27, by Wm. Grimes, one flea bitten gray mare about 15 hands high, 10 years old, no marks or brands, valued at \$20.

MARE—Also one dark bay mare, 15 1/2 hands high, 7 years old, no marks or brands, valued at \$40.

Strays for the week ending July 7.

Anderson county—Thos. W. Foster, clerk.

PONY—Taken up by W. H. Savage, Indian Creek, June 2, 1880, one bay on left hind leg, collar marks, valued at \$10.

MARE—Also by the same one dark bay mare 6 years old, black face, shod on front feet, branded O on right shoulder black mane and tail, valued at \$20.

MARE—Also by the same one clay bank dun colored mare 10 years old dark mane and tail, harness marks, valued at \$25.

Dickinson county—T. J. Crozier, clerk.

MARE—Taken up June 11, 1880, by Daniel R. Ogden, one dun colored mare 3 years old, black mane and tail, indelible brand on left hip and shoulder, shod on front feet, valued at \$30.

MARE—Taken up May 15, 1880, by William, Chikaskia, one bay pony horse, branded R on left shoulder, saddle and harness marks, rope mark around the head under the eyes, heavy halter on, heavy mane and tail, supposed to be six years old.

Wabunsee county—T. N. Watts, clerk.

MARE—Taken up by H. E. Johnson, Maple Hill, June 4, 1880, one light bay mare about 9 years old, sixteen hands high, weight about 1100 pounds, valued at \$40.

ANCHOR LINE.

UNITED STATES MAIL STEAMERS.

NEW YORK TO GLASGOW.

CABINS, \$60 to \$80. STEERAGE, \$28.

These Steamers do not carry cattle, sheep or pigs.

And every Saturday.

NEW YORK TO LONDON DIRECT.

CABINS, \$50 to \$80. STEERAGE, \$28.

Passenger accommodations are unsurpassed.

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Passengers booked at lowest rates to or from any Railroad Station in Europe or America.

Drafts at lowest rates, payable (free of charge) throughout the world.

For books of information, plans, etc., apply to HENDERSON BROTHERS, 16 Washington St., Chicago, or to ROWLEY BROTHERS, or A. J. HENDERSON, Toledo.

VICTOR STANDARD SCALES.

ALSO VICTOR SELF-GOVERNING WIND MILLS.

Every SCALE and every MILL warranted equal to any in the market. Buy the best. It is always the cheapest. For prices, address

MOLINE SCALE CO., ILLINOIS.

CATTLE ROOTS. TABLE TURNIPS.

Bloomsdale Swede or Ruta Baga, Yellow Aberdeen, Pomeranian Globe, Red and White Flat Turnips. Our stocks of the above are SUPER EXCELLENT. In localities where our TURNIPS SEEDS are not sold by merchants we invite CATTLE BREEDERS, SHEEP BREEDERS, DAIRYMEN, HORSEMEN, GARDENERS, to apply for RETAIL PRICE AND DESCRIPTIVE LIST. Address postal card to D. LANDRETH & SONS, Philadelphia.

Land! Land! Land!

HOMES FOR THE PEOPLE

350,000 ACRES

—IN— Bourbon, Crawford & Cherokee CO'S, KANSAS,

Still owned and offered for sale by the MISSOURI RIVER, FORT SCOTT AND GULF RAILROAD COMPANY

On Credit, running through ten years, at seven per cent. annual interest.

20 PER CENT DISCOUNT FOR CASH IN FULL AT DATE OF PURCHASE.

For Further Information Address JOHN A. CLARK,

Fort Scott, Kansas LAND COMMISSIONER

KANSAS

The ATCHISON, TOPEKA and SANTA FE R. R. CO. have now for sale

TWO MILLION ACRES

Choice Farming and Grazing Lands, specially adapted to the Wheat Growing, Stock Raising, and Dairying, located in the Cottonwood Valley from extremes of heat and cold; short winters, pure water, rich soil: in

SOUTHWEST KANSAS

FOR FULL PARTICULARS, ADDRESS

A. S. JOHNSON, Land Commissioner A. T. & S. F. R. R. Co. Topeka, Kansas.

LANDS

SIXTH AVE. STEAM FEED MILL.

In connection with our Grain, Flour, Feed and Hay business we have now in operation a Steam Mill and are prepared to do custom work, or to exchange corn chop, meal, etc., for corn. A portion of your patronage is solicited. Satisfaction guaranteed.

EDSON & BECK, No. 115, 6th Ave., East, Topeka, Kas.

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Can learn the exact cost of any proposed line of Advertising in American Papers by addressing Geo. P. Rowell & Co's Newspaper Adv'g Bureau, 10 Spruce St., N. Y.

XX COT (not painted, White Duck) \$2.

Makes a perfect bed. No mattress or pillows required. Better than a hammock, as it fits the body as pleasantly, and lies straight. Folded or opened instantly. Self-fastening. It is just the thing for hotels, offices, cottages, camp-meetings, sportsmen, etc. Good for the lawn, piazza, or "coolest place in the house." Splendid for invalids or children. Sent on receipt of price, or C. O. D. For 50 cts extra with order, I will prepay to any railroad station east of Mississippi River and north of Mason and Dixon's Line. For 75 cents, in Minnesota, Missouri and Iowa.

HELMON W. LADD, 108 Fulton St., Boston; 207 Canal St., New York; 165 North Second St., Philadelphia; 94 Market St., Chicago, Ill. Send for Circulars.

WOOL-GROWERS

Can rely upon immunity from contagious disease in their flocks after use of LADD'S TCBACCO SHEEP WASH. GUARANTEED AN IMMEDIATE CURE FOR SCAB AND PREVENTION OF INFECTION BY THAT TERROR TO FLOCK-MASTERS. GUARANTEED TO MORE THAN REPAY THE COST OF APPLICATION BY INCREASED GROWTH OF WOOL. GUARANTEED TO IMPROVE THE TEXTURE OF THE FLEECE INSTEAD OF INJURY TO IT AS IS THE RESULT OF THE USE OF OTHER COMPOUNDS. GUARANTEED TO DESTROY VERMIN ON THE ANIMAL AND PREVENT A RETURN. GUARANTEED TO BE THE MOST EFFECTIVE, CHEAP AND SAFE REMEDY EVER OFFERED TO AMERICAN WOOL-GROWERS. No flock-master should be without it. I have the most undoubted testimonials corroborative of above. Send for circular and address orders to W. M. LADD, 21 N. Main St., St. Louis, Mo.

The Sheep's Life and Shepherd's Friend.

New and very Important Discovery.

Deodorizer, Disinfectant, Antiseptic, Insecticide,

and valuable Therapeutic agent. Little's soluble Phenyl; also Little's Chemical Fluid. The new sheep Dip is a sure cure for Scab, Mange and foot rot, kills lice, ticks, and improves the growth and quality of wool; cheaper and better than anything of the kind in use at present, as one trial will prove, costing less than three cents to dip a sheep, mixes readily with water, and is used as a dip in cold water at all seasons of the year; has all the advantages of carbolic and arsenic without their poisonous effects. Send a 3 cent stamp for prospectus and testimonials to

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THE untold miseries that result from indigestion in early life may be alleviated and cured. Those who doubt this assertion should purchase the new medical work published by the PEA BODY MEDICAL INSTITUTE, Boston, entitled THE SCIENCE OF LIFE; OR, SELF-PRESERVATION. Exhausted vitality, nervous and physical debility, or vitality impaired by the errors of youth or too close application to business may be restored and manhood regained.

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The author refers, by permission, to Hon. P. A. HISEL, M. D., president of the National Medical Association.

Address Dr. W. H. PARKER, No. 4 Bullfinch Street, Boston, Mass. The author may be consulted on all diseases requiring skill and experience.

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DAY'S Kidney PAD

A CURE for the most prevalent and fatal disease that afflicts mankind FOUND AT LAST.

Internal medicine never did nor never can cure KIDNEY DISEASE. STOP IT NOW! Apply DAY'S Kidney PAD AT ONCE, and be cured of all affections of the Kidneys, Bladder and Urinary Organs. It is the only treatment that will cure NERVOUS AND PHYSICAL DEBILITY, and that distressing complaint, "BACKACHE."

It will annually save many times its cost in medicines and plasters, which at best give but temporary relief. Sold by Druggists or sent by mail on receipt of price.

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WARNER'S SAFE BITTERS

In eliminating the impurities of the blood, the natural and necessary result is the cure of Scrofulous and other Skin Eruptions & Diseases including Cancer, Ulcers, and other sores. It is the best Blood Purifier, and stimulates every function to more healthful action, and thus a benefit in all diseases.

Dyspepsia, Weakness of the Stomach, Constipation, Dizziness, General Debility, etc., are cured by the Safe Bitters. It is unequalled as a purifier and Tonic. It is a medicine which should be in every family, and which, wherever used, will save payment of many doctors' bills.

Bottles of two sizes; prices 50 cents and \$1.

WARNER'S Safe Remedies are sold by Druggists & Dealers in Medicine everywhere.

H. H. Warner & Co., Proprietors, ROCHESTER, N. Y.

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"For stinking spells, fits, dizziness, palpitation and low spirits, rely on Hop Bitters."

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"Clergymen, Lawyers, Editors, Bankers and Ladies need Hop Bitters daily."

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In Shawnee and adjoining Counties on good Farm security

At 8 and 9 per cent.,

For Annum.

H. D. CLARK,

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Hides, Sheep Pelts, Furs and Tallow,

And Manufacturer and Dealer in

SADDLES, HARNESS,

Whips, Fly Nets, Horse Collars, &c.

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TERMS, STRICTLY CASH.

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Established in 1866 ORIGINAL AND ONLY GENUINE

"VIBRATOR"

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THE STANDARD of excellence throughout the Grain-Raising World.

MATCHLESS for Grain-Saving, Time-Saving, Perfect Cleaning, Rapid and Thorough Work.

INCOMPARABLE in Quality of Material, Perfection of Parts, Thorough Workmanship, Elegant Finish, and Beautiful Appearance.

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PORTABLE TRACTION, and STEAM-POWERED STEAM-ENGINE, with special features of Power, Separators a specialty. Four sizes of Separators, from 6 to 12 horse-power; also 2 styles Improved Mounted Horse-Powers, men, furnishes a strong guarantee for superior goods and honest dealing.

CAUTION! The wonderful success and popularity of our Vibrator Machinery has driven other Threshers to the wall, and the result is that many Threshers are being sold and used at a loss, and the owners are being deceived by cheap imitations of our famous goods.

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Full particulars call on our dealers, or write to us for Illustrated Circulars, which we mail free. Address NICHOLS, SHEPARD & CO., Battle Creek, Mich.

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On account of the great interest created by the introduction of

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Which has been planted in great quantities the demand for machinery will be immense, and it stands those in hand who wish to make a success at molasses and sugar making to procure their MACHINERY before the rush comes on. BUY ONLY THE BEST that can be procured. All successful sorgo raisers will tell you to avoid cheap machinery. We are Western Headquarters for

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Which is the acknowledged STANDARD SORGO MACHINERY. Is built with great strength, and covers patents that places it far ahead of anything in this line, the prices may seem higher, but by comparing STRENGTH and WEIGHT it is JUST AS CHEAP AS ANY OTHER, therefore is the best to buy. We also expect to keep in stock the best make of CENTRIFUGALS FOR SUGAR MAKING.

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SHORT HORNS.

Kentucky Summer Series of Sales:

On Wednesday, July 28th, at Mt. Sterling, Ky.,

T. CORWIN ANDERSON, of Side View, will sell ninety (90) head of Pure Bates and other high class Short Horns topped out with choice Duchess and Oxford Sires. Sale will begin promptly on arrival of noon train.

On Thursday, July 29th, at Stock Place, near Winchester, Ky.,

VAN METER & HAMILTON will sell a very attractive draft of seventy (70) head from their very large herd of Short Horns; consisting of females safe in calf, or cows with young calves, a few choice young Bulls, and all of desirable age.

On Friday, July 30th, at Winchester, Ky.,

B. A. & J. T. TRACY will sell their entire herd (60 head) of carefully and finely bred Short Horns, consisting of Rose of Sharon, Young Marys and Phylissas topped with high bred Rose of Sharon and straight bred Duke Bulls, also some high class Rose of Sharon Bulls.

On Saturday, July 31st, at Cloverland, near Lexington, Ky.,

WM. T. HEARNE will sell his entire herd (60 head) of Short Horns, consisting of Frantic, Finesses, Craggs, Fennel Duchesses, Lady Bickerstaff's Hipsas, Kirklevingtons, and Young Marys. Twenty head (60 head) of Short Horns, consisting of females safe in calf, or cows with young calves, a few choice young Bulls, and all of desirable age.

On Monday, August 2d, at Lexington, Ky.,

WM. WARFIELD & CHAS. A. FARRA (both of Lexington) will sell sixty (60) head of well bred Short Horns, representing those choice families which they have bred so skillfully for a great many years.

On Tuesday, August 3d, at Lexington, Ky.,

WALTER HANDY, of Wilmore and C. S. SPILMAN, of Brantsville, will sell seventy (70) head of choice Short Horns of the Fougathorpe, Mazurka, Mason Victoria, Young Marys, Phylissas and Aurora families. Many of the young things are of rare individual merit, and will be in fine flesh and condition.

On Wednesday, August 4th, at Stony Point, Ky.,

J. ED SUDDUTH, of Stony Point, and R. DRENT HUTCHCRAFT, of Paris, will sell their entire herd (60 head) of Short Horns, consisting of Rose of Sharon, Young Marys, Jessamines, Galatias, Lanthas, Desdemonas, and other good families.

On Thursday, August 5th, at Paris, Ky.,

WM. T. SYDNER, of Mt. Sterling, and ROBT E. POGUE, of Helena, will sell sixty (60) Short Horns, 35 High Class Phylissas, 20 extra Renick Rose of Sharon topped Cambrias, and Harris, bred to Rose of Sharon Bulls, and a few others including the grand breeding sire Valeria Duke 25,000.

N. B.—Catalogues of each herd on application to the owners of the respective sale herds. Visiting breeders will have the opportunity to visit almost every prominent herd in Kentucky, both of Cattle and Horses.

Golden Medical Discovery

Dr. Pierce's Golden Medical Discovery cures all Humors, from the worst Scrofula to a common Clot, Pimple, or Eruption, Erysipelas, Salt-rheum, Fever Sores, Scaly or Rough Skin, in short, all diseases caused by bad blood, are conquered by this powerful, purifying, and invigorating medicine.

Especially has it manifested its potency in curing Tetter, Rose Rash, Boils, Carbuncles, Sore Eyes, Scrofulous Sores and Swellings, White Swellings, Gout or Thick Neck, and Enlarged Glands.

If you feel dull, drowsy, debilitated, have a yellow color of skin, or yellowish-brown spots on face or body, frequent headache or dizziness, bad taste in mouth, internal heat or chills alternated with hot flushes, irregular appetite, and tongue coated, you are suffering from Torpid Liver, or "Biliousness." As a remedy for all such cases Dr. Pierce's Golden Medical Discovery has no equal, as it effects perfect and radical cures.

In the cure of Bronchitis, Severe Coughs, Weak Lungs, and early stages of Consumption, it has astonished the medical faculty, and eminent physicians pronounce it the greatest medical discovery of the age. Sold by druggists.

No use of taking the large, repulsive, nauseous pills. These Pills (Little Pills) are scarcely larger than mustard seeds.

Being entirely vegetable, no particular care is required while using them. They operate without disturbance to the system, or occupation. For Jaundice, Headache, Constipation, Impure Blood, Stains in the Shoulders, Tightness of Chest, Bizziness, Sour Eructations from Stomach, Bad Taste in Mouth, Bilious Attacks, Pain in Region of Bronchitis, Severe Coughs, Weak Lungs, and early stages of Consumption, it has astonished the medical faculty, and eminent physicians pronounce it the greatest medical discovery of the age. Sold by druggists.

WORLD'S DISPENSARY MEDICAL ASSOCIATION, Prop'rs, Buffalo, N. Y.

Farm Letters.

NAOMI, Mitchell Co., June 28.—While so many others are reporting good rains, we are still suffering for want of rain in this vicinity. Since I wrote last we have had several nice showers, though none of them have wet the ground over three inches in depth. There has been but very little breaking done. Much plowing for corn was done late, and some fields were planted as late as the 10th of June. Much of it did not come up, and large fields of that which did grow was destroyed by the chinch bugs, which are very numerous, and left the wheat fields as soon as it was harvested. Unless we get rain soon, and heavy rain to, the bugs will not leave us any corn. It rolls up badly every day.

Some have lost all their small grain, and have a poor prospect for corn. Harvesting fall wheat will be over in a few days. Some has been threshed and averaged about four bushels per acre. The best that I have seen in our neighborhood yielded 7½ bushels. Spring wheat is thicker, and with rain soon, would be better. But it is not filling well now. Fall wheat is not plump—the cause, bugs.

Garden sauce and vegetables are scarcely found. Potato bugs have destroyed a great many potatoes. It is not enough to have chinch bugs and potato bugs, but the country has been overrun with those humbugs, the lightning rod agents. In some instances they find a farmer who has a little influence and more love of money than principle and give him \$5.00 per day to go around and help them gull his neighbors. Here is another way of making a sale. The contractors went to see one man having a small house and a small barn. He said he was not able to pay for rods, and did not wish to run into debt. He is a single man, his farm rented, crops poor, and he had no way of paying for the rods. The contractor was a kind hearted man, and would give him work. They needed a hand soon to help put up the rods. If he would take the rods, the company would take him into their employ at such a date and give him \$35 per month and pay expenses, not only till the rods were paid for, but right along. Of course the innocent and unwary saw no trick in that, so he signed a contract for the rods. In a few days the workmen came around and put up the rods. Under the promise that he should have his note as soon as he had worked it out he signed it all right, a note as he says for \$65. The time came when he was to begin work, and behold! they did not need a hand, and had signed no contract agreeing to employ him. He soon learned that his note calling for \$100.65 had passed into second hands. They having left a space between the dollar sign and 65 and had inserted 100 between so as to make it read \$100.65. If he had read the KANSAS FARMER every week, as every farmer should, he might have been looking out for just such scamps, and saved himself a heavy debt.

Those wishing to come west with the money to buy, can now buy improved farms very cheap, as there are plenty who wish to sell and try some other locality. Wheat is down to 60c. There will not be any new oats here. Corn is 25c; hogs down to \$2.50; butter, 8c; eggs, 9c. Milch cows about \$20. Feed is poor and fast getting dry. If the drought continues we will have to save all our straw. There is no prospect of hay, not even millet, as the bugs are eating that up. When I write again I hope to be able to give a better report.

F. P. BAKER.

EXETER, Clay Co., June 30.—We have had several nice rains and the farmer is happy. Wheat nearly all harvested; yield about the same as last year. Good prospect for corn and hay. Although Clay county does not have much to say, it is not behind any of them.

Could not live without the FARMER.

W. N. S.

WAKEFIELD, Clay Co., July 5.—81 miles west by north from Topeka. To-day was to have been our "Fourth," but for a week and more it has been raining day and night, with now and then through the day sunshine enough to remind us that we were in Kansas still. We needed the rain. We have earnestly prayed for it. It is now conceded that our wheat crop is less than half a crop; to be sure some few fields have gone 15 bushels to the acre, but some much less; one of nearly 52 acres gave 115 bushels of wheat, and our "boss" field is so injured by the rain of the past week, that it is growing in the shocks. Others still uncut, and two weeks overripe will hardly be worth cutting.

The story of our wheat harvest in this part of the county, is a sad one. Whether it would be well or do harm to tell it, I do not know. When all the moisture was taken from the wheat straw, the armies of the chinch bug moved into whatever came next: oats, or millet, or corn—from 5 to 9 acres of the two last have been destroyed in places, and the land ready for plowing or anything else. None of our people have talked or thought of going to their "wife's relations" unless it be to meet them on the "other shore," but have struggled on with cultivator and gopher, praying for rain that should save our corn that was already drying up. The rain of the past seven days has revived the corn. Has it killed the chinch bug?

On the morning of the 24 we were visited by a heavy wind that destroyed whole acres of corn, breaking it off so that it lay dead and white. The lightning was very vivid. As the wind blew and shrieked, the trees bent and swayed and the rain came in great sheets.

Will you give us some information in regard to chicken cholera. It has got among my fowls. I have fumigated with sulphur, disinfected with

carbolic acid, put alum in drink and bought Venetian red, but am afraid to give it. What good could it do?

I received a paper each of American Vanilla and Holly in the spring. I put in some of the Holly, but it didn't come. How shall I plant the rest, and how proceed with Vanilla?

M. S. L. B.

Since our advice is asked how to proceed with vanilla and holly seed we will give it. Put them in the stove, and put out as many cottonwood cuttings as you find time to plant well, in east and west belts across your farm, with black walnuts and some other native, hardy varieties, list of which have been published in the FARMER. What would you do with holly brush if you had eleven acres of it?—[Ed.]

ARGYLE, Sumner Co., June 26.—Farmers in this part are about 'through with their harvesting. Nearly all the grain was cut with headers, owing to the shortness of the straw. Wheat will average about 9 bushels per acre throughout the county. Some chance fields have made as high as 15½ bushels per acre, but there are more that will not make 6 bushels. The crop was greatly injured on the 18th of March by the dry, freezing weather.

Oats will be a light crop this year. Notwithstanding they look well, they are not filling well for want of rain. Chinch bugs are likewise working on them as on the corn and millet. Corn is nearly all laid by and is tasseling out. If we get rain soon some fields will perhaps make two-thirds of a crop. Farmers who had started to plow their wheat ground had to stop on account of the ground being dry and hard.

Corn is selling for 32c; wheat, new, 50c, old, 60c to 65c; oats, 28c to 30c; hay, \$2.75 to \$3; hogs, \$3 to \$3.25.

No diseases of any kind among the stock in this locality.

The crop statistics of this township (London) for 1880 are as follows: Wheat, 4,252; rye, 16; corn, 4,308; oats, 692; Irish potatoes, 64; sorghum, 60; millet and Hungarian, 284.

P. S. Since writing the above we have had a good rain which will help things greatly.

THOMAS NIXON.

NAOMI, Mitchell Co., June 30.—This forenoon we had the best rain of the season, with a little hail, but little wind. It came very fast and lasted about three quarters of an hour. The ground was flooded and the draws were again changed to little rivers. It is raining again this evening and bids fair to rain a good deal. I think both rains extend over a good many miles. There is much loose grain on the ground, but we are only too glad of the rain, for now we can reasonably look for corn and potatoes. The rain is very cool, and we think it will destroy many chinch bugs, which are getting extremely numerous. We feel much more like celebrating the glorious old Fourth now than we did yesterday.

F. W. BAKER.

LEROY, Coffee Co., June 28.—After a long dry spell we are refreshed with those glad tidings of rain on the roof. I had just completed stacking my wheat, which consisted of ten acres of very good wheat, which I suppose will yield something over twenty bushels per acre. My drilled wheat yielded very well, but broadcast almost a failure. The wheat crop in this part of the country was considered good for the season, and as a commendable duty everything in the image of vegetation is promising, or, in other words rather superior for the season of that part which is past.

Considerable threshing already done. Mr. I. L. Ward has threshed some 630 bushels from 40 acres. Many other pieces are yielding as much and some more. I heard of one piece turning out 27 bushels per acre. This piece was raised by Mr. John Davis.

Cows and sheep are in great demand. Cows are changing hands at \$25 to \$35 per head; sheep, various prices, from 2.25 to \$3 per head. Wheat, I understand, is 75c to 80c per bushel at the Excelsior mills, Burlington.

The many correspondents who give experiments and make suggestions to the readers of the Old Reliable KANSAS FARMER, make it more and more interesting to all who avail themselves of the opportunity of perusing its columns, as they come weekly well laden with something new.

I think from the present appearances we will be blessed with good crops generally.

H. R. BALDWIN.

MERIDEN, Jefferson Co., July 3.—Yesterday we had a violent rain attended with wind, which prostrated the corn, shook the young apples, upset the fences, and for a brief period caused some long faces, but passed off without doing any very great damage. To-day another rain but unattended with wind. Wheat mostly secured and likely to exceed a half crop. The prospect of an average crop of corn is good. Potatoes have been slow in growing but will most likely be more plenty hereafter.

THE OLD MAN OF MERIDEN.

Southeast Corner Cloud Co., July 5.—I enclose 75 cents to pay my subscription to the FARMER up to January 1st, 1891. Having only been in the state fourteen months, and never having farmed any before I came here, I cannot write anything that will be of much benefit to your readers, but being in that part of the state (Solomon Valley) and on the traveled road leading from Solomon City to Beloit, and which is pronounced by all with whom I have come in contact, the richest part of the state, perhaps our readers would like to know the outcome of our wheat crop as well as the prospects for corn. The former is all harvested, but very little of it thrashed. The straw was very short, but by using headers it was got into

stacks before the rain set in. Wheat that has been thrashed has not come up to expectations, yielding only 2½ to 8 bushels per acre. Chinch bugs were plentiful, and in some places they have made inroads into the corn fields, but the heavy rains during the past week have probably checked their march if not destroyed them entirely.

Corn is looking well considering we have had no rain since last November up to the past week, except a couple of light showers in May, after planting.

I am building a manger and stock shelter combined, after the Stoner pattern, and will tell your readers how I like it, after it comes to be used. It is 16x30, using 10-foot rafters.

The farmers about here are getting discouraged raising wheat, and will in the future pay more attention to hogs and cattle. Such has been my intention since I came to the state, raising only enough wheat and vegetables to supply my own family, and the rest of my quarter section to feed for stock.

Wheat in Delphos, my nearest market, is 55c a bushel; corn, 20c.

I like your paper very much, and find considerable in it that to me is very valuable. I take another exclusively farm journal, and two other papers that have farm columns, but yours I like the best. During the past week, in the rainy weather, I set about cutting out the most valuable articles from the other papers for pasting in a scrap-book, but when I came to yours I was lost where to begin, there is so much valuable matter running through every number. Cannot you give us an index? Even if you have to make an extra charge for it, I believe your readers would sustain you.

ARCHIBALD BARNES.

GIRARD, Crawford Co., July 5.—We are having plentiful showers, some farmers complaining of excess, and injury to wheat, oats and flax. Wheat generally stacked, what remains in shock only liable to injury. Flax too ripe and weak, but cannot be cut on account of wet. The corn crop bids as fair as we have ever had in the country.

Cherries and small fruits were plentiful. Seedling peaches will be a full crop. Many are now ripe and on the market. Budded peaches killed by late frosts. Apples growing finely, and where trees have sufficient age, are yielding satisfactorily.

The Crawford County Agricultural Society holds its eighth annual fair at Girard, September 7th, 8th, and 9th, and as the premiums offered are more than ordinarily liberal, it is expected the exhibition will surpass all previous fairs of the county.

Stock of every kind is healthy. I do not know of any prevailing disease among any class.

Crawford county is on the high road to fame as an agricultural county. Her rich soil is teeming with abundant crops that have matured and the prospects are exceedingly flattering for all the general crops that have not matured. In fact it does seem as though the border tier of southeast Kansas will certainly be compelled to lease a portion of Missouri, or the drouthy portion of Kansas, on which to store its excess of corn, potatoes, and other productions.

A moderate but steady immigration is coming to our county, and I am glad to have to say that the class of citizenship is improving; that much more vim and enterprise characterize our people, and so may it continue, for our soil and natural resources are not inferior to any county in the state.

JOHN BUDY.

BELLE PLAINE, Sumner Co., July 5.—Our wheat harvest is all gathered into the stack-yard, and many are threshing. I do not approve of threshing wheat until it passes through a sweat, although some wise ones say wheat will not sweat after being harvested.

We have had rain enough to insure a good corn crop. The most of our corn is shooting, and this rain came in good time. We also think now we will have a good potato crop. The enumerators report our county's population nearly 21,000. On last Saturday, the 3d, we had 2,000 of them at a good, old-fashioned celebration.

Peaches are scarce, so are apples and pears. Strawberries and blackberries were cut short by the dry weather. Grapes are a full crop on high land, but in the valleys were injured by frost. It has not been as good a year as usual for the growth of fruit, forest trees and hedge; season too dry.

H. C. ST. CLAIR.

ROCK, Cowley Co., July 5.—Wheat harvested and all in the stack. Bottom and valley land very light, say one-fourth crop. Upland good. 10 to 18 bushels per acre. Corn looking quite well and promises a good yield notwithstanding the great damage sustained by the ravages of the chinch bug. The latter pest has about disappeared.

Abundant rains the past ten days have set the prairie-breakers running. Some of my neighbor farmers are trying their hand at castor bean cultivation which at this time promises to be a success.

Small fruits in abundance, and on uplands there are considerable peaches and a few apples, although the country is almost too new for many apples yet.

Stock in general looking well being free from diseases of any kind.

Would not a more thorough cultivation of wheat ground insure a more certain and larger yield than under the common system of culture? I believe if farmers would plow their ground for wheat immediately after the wheat is removed from the field, say in June, plowing the ground not less than eight inches deep, and following immediately with a heavy roller, the heavier the better. Let the ground lay undis-

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turbed until seeding time, then harrow, drill and roll again. In the spring narrow with a sharp-tooth harrow and follow with roller. I think under this system dry weather would have little effect and the yield be doubled.

COWLEY.

CAMDEN, Morris Co., July 4.—Fine rains of late have refreshed the face of the country, and we can call our county anything but dry at present. A heavy hail storm passed over and left a fair share last evening, which blew the corn down badly and soaked the ground well, but did not do any great damage as far as heard from. Fall wheat was poor except on some bottom land, which some claim will have twenty-five bushels per acre. Spring wheat and oats are good, and corn looks well at present. With the ground well soaked we might expect a good crop, if Mr. Chinchbug was dead, but as they are numerous, it will take time to tell which will be the best crop in September—corn or chinch bugs, but we hope for plenty of rain in the future, and corn will come out king.

Wheat, 70 to 80c; corn, 30c; potatoes, \$1; hogs, \$3.20; cattle, \$2.50 to \$3.

J. L. SHORE.

NEOSHO FALLS, Woodson Co., June 24.—We have had a splendid rain to-day which we needed very much. Corn is looking well here. Wheat all cut; oats not ready yet; chinch bugs are doing damage in places. The dry weather suited them; the rain will check them somewhat.

We lost a spring calf last week with black-leg. The cause, forcing it too hard; the cow gives very rich milk. We allowed it to run with her and take it all and grass besides, which is very rich just now.

A great many people are going into the sheep business in this part of the county. Most people herd them on the prairie, whereby they lose one-third of the profits from them, as there is nothing enriches farm land better than sheep. If each farmer would fence his farm into ten and twenty acre lots and keep a few sheep, and have them inside, his farm would always be rich, and by that means he would make more than in keeping a large herd on the prairie.

Our Kansas land will soon run out unless we return to it some of what it gives to us so bountifully at present. Good farming will pay here in Kansas. Starve the land and we starve ourselves.

I see some orchards here that are well matured, they give lots of nice large apples, others I see that are not matured and full of weeds, the consequence, small apples and very few of them.

Grapes are booming crop this year in this part of the county.

Could gooseberries be budded or grafted so they would grow here? C. H. NICHOLS.

KIRWIN, Phillips Co., July 4.—Drouth reports are "played out." Rain is the toast. Solomon up so we cannot get to town. Bow creek booming. Corn promises a bountiful crop and is clean and well worked. Millet coming along beautifully. Spring wheat and oats that were not plowed up are getting out some little heads, although so terribly stunted by the drouth. A few pieces of fall wheat have been headed, the remainder, "later kinds," will soon be ready. But few pieces were left as wheat anything, nearly all having been plowed up for corn. Grass is very short, but if it keeps short will grow tall enough for hay yet.

Quite a number of settlers have gone east to get work and something to live on. Many left, disgusted, before the rains came, thinking that there was no chance to make a living in this country. One man went to Oregon from here, saying this country was too dry and had too little timber. He writes from there that it had rained every day since he arrived but one, and that there is too much timber, otherwise he thinks the country will do.

We have one of those persons in our neighborhood that you will find in many communities that is supposed "by many" to know how to doctor up cows, horses, etc. One of my neighbors had a sick cow. He called the old man, who with great gravity proceeded to examine the cow. After feeling over her awhile, says: "I can tell you what ails your cow. She has the hollow horn, hollow tail, and has lost her food," and proceeded at once to split her tail, put spirits turpentine behind her horns, and give her dish-cloths to restore her "food" (cud). This shows great ignorance in regard to ruminating animals. If they are sick and eat nothing they have nothing to rechev, and when they do not chew their cud it is sure evidence that they are sick. The great trouble is, sick cattle are doctored too much. I had a valuable cow sick twenty-five years ago, and in my anxiety to save her, dosed her with everything that different persons suggested, consequently killed her. Since then I have lost but one and that was nearly dead when I discovered it.

When any are sick I give a little saltpeter (tea-spoonful) with salt, meal, or anything they will eat, or give some strips of poke-root (garget)

boring out the peth of ears of corn and sticking in the strips of root,—sure cure for garget in milch cows.

I heard W. W. Cone, a few years since, say he saw, at Junction City, a machine for cutting, packing and tying twigs, brush, limbs, etc., into fuel ready for the stove. Who has them to sell? If they can do as good work as he represented, I should like to purchase one, having acres of willows, mostly skunk willows, good for nothing at present.

D. S. A.

Write to Hon. John Davis, editor Junction City Tribune, who, we believe, is agent.

RAY, Pawnee Co., July 7.—Seven weeks ago one might as profitably have spent his time writing for the FARMER as in any other way. Labor upon the soil did not promise to be very remunerative. But the showers of the latter part of May were followed by heavier and more abundant ones the last fortnight in June, and these, in turn, reaching over into the present month, give us hope that the late crops will not be a total failure, and men are at work sowing, planting and cultivating. A little wheat was cut in the county, but whether the farmers will be able to save it, is still a problem, owing to the wet.

Indian corn, Egyptian sorghum and millet, look well in places. The worms have cut down a field here and there, and the miller has settled down in some localities with his blighting influence. They have both been checked, however, to some extent by the seasonable rain, while the weeds spring up with new life.

The grass grows. Stock brightens up as the season advances.

Emigration and not immigration, is still the movement. But some hold on and work in hope. They still believe that this country was made to live in, and they will satisfy themselves that it is not, before moving out.

F. F. DOWNS.

England and Wales contain 58,320 square miles, Ireland 31,874, and Scotland 30,685; total 120,879 square miles. The state of Texas contains 274,356 square miles, and yet Great Britain and Ireland produce very nearly as much marketable wool as the whole of the United States. With a practically unlimited area, any part of which is available for sheep growing, we yet are large importers of foreign wool, over 65,000,000 pounds having been imported during the last year as against about 35,000,000 the year previous, notwithstanding that there is a heavy import duty. In view of these facts it is not a little surprising that capital does not seem to flow in the direction of wool growing. The production of wool seems to be a very important factor in national independence; and in other countries, particularly in Great Britain, considered an essential part of nearly every farmer's business. The risks in sheep farming are few in immense tracts of this country, and the business is attractive from its comparative freedom from the excessive toil and anxiety consequent upon other agricultural pursuits. There is a good opening in this direction.—New York Indicator.

The Prairie Farmer figures out the cost of sending a bushel of wheat from Chicago to Liverpool: Storage at Chicago 1½ cents, freight to Buffalo 6 cents, marine insurance ½ cent, Buffalo charges ½ cent, canal freight 6 cents, expenses to New York 1 cent, ocean freights 8 cents, insurance 1 cent, making a total of 24½ cents per bushel.

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will restore the healthy action and all these destroying evils will be banished; neglect them and you will live but to suffer. Thousands have been cured. Try it and you will add one more to the number. Take it and health will once more gladden your heart.

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Why bear such distress from Constipation and Piles?
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