

THE KANSAS FARMER

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THE KANSAS FARMER.

HUDSON & EWING, Editors and Proprietors
Topeka, Kansas.

Money at 10 Per Cent.

EDITORS FARMER:—I read your paper with interest and having as a farmer been both borrower and lender, I can echo your advice to young farmers,—"Keep out of debt."

But, when your young friends undertake to legislate and say what interest a man shall receive for the use of his savings by another, they go a step too far. If they don't like his money they need not borrow it; there is no compulsion. Let us see about what capital is worth to a young farmer who has not anything but his labor, and enough things to furnish a small home. If he comes to me to hire out he is willing to acknowledge that \$150, and his board and lodging, is all I can afford to pay him. But suppose I say, I have capital saved, and you have labor, I will lend you \$1,500 at 10 per cent. How will he come out?

The cash will buy an unimproved 80 acres of land at	\$800
Team and wagon,	250
Reaper and mower,	100
Plows, harrows, etc.,	150
Two cows, pigs and chickens,	100
Share in seeder, hay-rake, etc.,	100
Total	\$1,500

Here is capital sunk of \$1,500. His first charge will be interest at 10 per cent. \$150. Wear and tear of team and tools, 10 per cent. more on \$500 worth, \$50 more, so he stands at \$200 a year for the use of his capital, and at \$150 a year for his labor, and \$100 a year for his board; that is what his services are worth in the market. Thus he stands at the expense of \$250 a year for his labor, or a total outlay of \$450.

He has a wife and two children and he does not wish to hire out, so he concludes to borrow my spare capital and be his own master. The state Reports show that he may expect to get 30 bushels of corn to the acre; 20 bushels of wheat and a ton of hay to the acre. With such good tools as this capital supplies, he grows 40 acres of corn worth, on same average, 20 cents per bushel, or \$240. Twenty acres of wheat at 20 bushels per acre, worth 60 cents per bushel, \$240. 20 acres of hay to feed his cows and calves, at \$4.00 an acre, or \$80. The gradual rise in the value of his land will equal his taxes and repairs on fences and buildings. Thus his total income will be \$560, less the corn he feeds his team and seed wheat, together about \$60; leaving his net income \$500. Now, this being \$50 more than his charges, he is \$50 ahead after paying his 10 per cent. and he has a home for his wife and children.

This is average, but a good farmer will raise more than 30 bushels of corn per acre, and when pork sells for more than \$1.00 a cwt., corn is worth more than 20 cents a bushel, and the milk and butter produced by his cows are worth something; so that even on the present low basis of prices the borrower would be ahead \$10 at least, by borrowing his capital at 10 per cent. instead of working as a hired man.

If he is a bad manager and spends at the store, \$10.50 when his income is but \$10, of course he gets into trouble. But if he works 20 years and saves his money and then lends it to a young man, he will begin to think it worth 10 per cent. on a GENERAL AVERAGE.

"General Average" may have noticed that slate pencils and actual results don't find the same answer to the question oftener than once in a hundred trials. Slate pencil farming has a clear field with no contingencies or drawbacks to guard against, but actual farming has an every day battle with these enemies, and the latter prove victorious ninety-nine times out of a hundred. 10 per cent. is too much for any farmer to pay for the use of money. It is more than it is worth in the real money market, or government could not borrow millions at 4 per cent.

But argument is of no importance when forestalled by actual facts; and the facts are that a very large majority of farmers who have 10 per cent. mortgages on their farm are wholly unable to pay and are being sold out every day. This statement holds good in all parts of the country. There is a world of Divine wisdom in that one line of the Lord's prayer,

"Lead us not into temptation," and the state should throw as many safeguards as possible round its industrious citizens to shield them from temptation, while it stands ready to "Deliver us from evil."

the worst evil which ever fell upon American farmers—borrowing money at heavy rates of interest.

An Old Settler's Reminiscences of McPherson County.

You may wonder why I have not renewed my subscription for the FARMER. I will say that I am too old now to farm any more. Had I remained on the farm, I could not have done without your paper. It was my counsel, companion and text book. And here let me say, that no farmer can be a successful one, unless he reads such papers as the Kansas FARMER.

Thirteen years ago I pre-empted 160 acres of government land in Salina county, Kansas. This land I cultivated for eight years successfully.

I came to this delightful country, as a fore runner for a colony of relatives, numbering some sixty; men, women and children. I wrote back to them saying that I had found the promised land. They sent a second agent out to see if what I had said was correct. He was more than pleased, and returned to his old Kentucky home, and said: "Tom told the truth, let us all pack up at once, and go to the most delightful country one ever saw."

They came in squads of fives, tens and twenties. All wanted Homesteads and wanted them joining. I got a compass and chain. I took the men, and a lot of posts and stakes to McPherson county, and located sixteen Homesteads and Pre-emptions of 160 acres each. These sixteen farms cannot be bought now for \$2,000 each, or \$32,000 for the lot. These families had not \$100 each after getting their teams, wagons, small houses and wells. Some of these farmers had been renters for 20 years in their native state.

It is true, McPherson county, is now the best county in Kansas, with a million of bushels of wheat surplus and a very large surplus of corn, pork, beef, oats; besides one third of all the broom corn raised in the state, is produced in this noble young county, peopled with 12,000 souls, and not a whisky saloon in the county. No county bonds, no debts. She has 94 free district school houses, nearly all well furnished with patent desks. A railroad will run through the county in one year from this date, I am quite sure. McPherson city is the county seat, with a population of 500; six ministers and six parsonages! Think of it. One parsonage to every 83 persons.

The last Indian warwhoop died away from here seven years ago never to return. The Kansas Pacific, and the A. T. & S. F. R. R., have much valuable land in this noble young county, for sale on long time.

May I ask the farmers east, why will you hold your old farms, that are not paying you three per cent on the money invested? Sell your land at \$30, \$40, \$50 and on up to \$200 per acre, come to this new country, and with the money you get for your old farm, buy a farm for each of your children. One acre here will produce as much as an acre will east. Bring on the boys and girls where they will have room to spread out. I have no land to sell, and am not a land agent. I met five years ago in Salina, a poor little chap, who asked me where he could find a Homestead. I sent him to McPherson. He has now a Homestead, five lots in the county seat, a dwelling house, a wife and two babies, a printing office and is a representative in the Legislature from that county. It don't rain in Kansas, it simply pours.

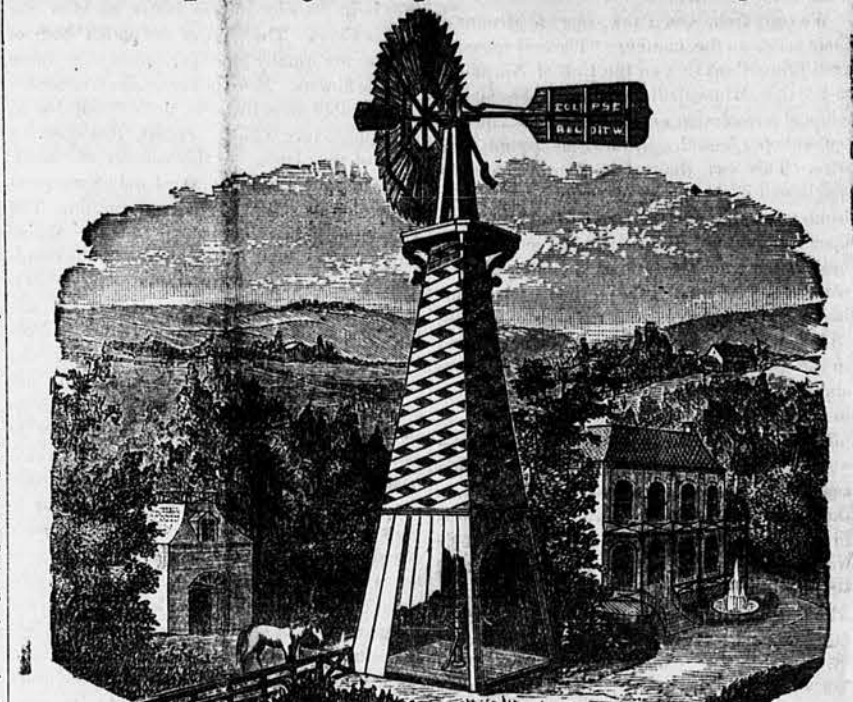
L. D. WICKERSHAM.
Salina, Kas.

There is no kind of corn that is so valuable to the labor bestowed, as sweet corn. It should be grown in quantities sufficient to give the farmer's family a good supply from the first of July to the middle of October. There is no other food that can be furnished so cheaply. It can be gathered, husked, cooked and put upon the table in the short space of half an hour.

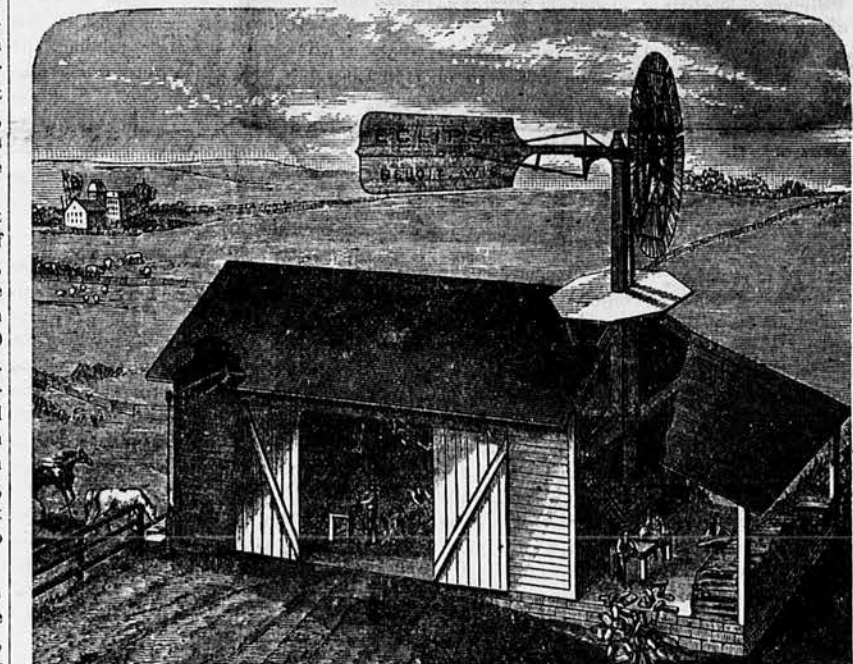
Another value that sweet corn has is drying for winter use. Scald the ear when the kernels have attained their full size, and cut them off and dry them in a pan in the oven, leaving the door open to allow the moisture to evaporate. When dry, store it away for winter use in a bag of open texture, hung up in a dry store-room, or on the rafters in the garret.

There was a wedding in Newton, Conn., the other day, after, as the local chronicler says, a vigorous courtship of 15 years. So delighted was everybody that the stars and stripes were hoisted in the hotel and many private residences, and a salute of many guns was fired at the hour of the ceremony.

The Strongest Wind Mill in the World! Victorious at Centennial, 1876, and Paris in 1878. Adopted by every Kansas Railway.



The Celebrated Eclipse Solid Wheel, Farm Wind Mill.



Eclipse Geared Mill, for Doing every variety of Farm Work.

The Celebrated Eclipse Wind Mills.

Two views of these renowned Mills are presented to our readers, showing actual results by the use of wind power. The Eclipse Wind Mill Company of Beloit Wisconsin are the original inventors of solid wheel wind mills, and the oldest, and by far the largest manufacturers of these goods in the United States, having a capacity in both factories for nearly 2,000 mills a year. The mill is world-wide in its fame, it being exported largely to Russia, India, Germany, Austria, Spain, France, South America, Australia and the Pacific Islands. It has received over 100 First Premiums and Diplomas, 5 Silver Medals, 2 Bronze and 2 Gold Medals.

It has taken the grand prize at the three World Fairs—Centennial 1876, Australia 1877, Paris, France, 1878 when it was victorious over 19 other competitors. It is the only wind-mill ever awarded a gold medal. The manufacturers are specially chartered by the state of Wisconsin and have an experience of 12 years in this business. They build 17 sizes of farm, railway and power mills, ranging in size from 8 feet to 60 in diameter, and for running from 1 man power to 40 horse power.

Communities can save themselves much money and trouble of going a long way to mill by erecting a power mill in their own neighborhood on joint account and then doing their own feed and meal grinding.

Every farmer can afford to have a small pumping mill. The great A. T. & S. F., and K. P. R. R.'s, use exclusively this Mill as being the strongest wind-mill they can buy.

Illustrated circulars can be had upon application to the Gen'l Manager of the company, C. R. Salmon Beloit, Wis.

Capt. Landreth, Chief of the Centennial Agricultural Bureau, selected your Mill from the others exhibited, and writes:
PHILADELPHIA, March 12, 1877.
The Eclipse Wind Mill erected by you has

given perfect satisfaction. It is always in order, is propelled by little wind, is noiseless and so simple that its management can be comprehended by those without the least mechanical ability. Yours respectfully,
BURNET LANDRETH.

OSCAR SCHULZE, Engineer, sent over by the great Leipzig Agricultural Machine Company of Germany, after examining all the Wind Mills exhibited at the Centennial pronounced the Eclipse not only by far the best, but said it really was the only Mill constructed on scientific principles, and purchased a Pumping Mill and a large 30 ft Geared Mill.

Mr. L. Broadhead, the widely known superintendent for the great stock farm of Mr. Alexander, at Spring Hill, Ky., says:

Your 16-foot Geared Mill at our barns grinds all our feed and makes nice meal. We could not do without it. The Mill is simple and durable, and highly prized by Mr. Alexander and duly appreciated by myself. You are at liberty to refer any stock men to us. Resp'y,
L. BROADHEAD, Supt. Woodburn Farm.

As evidence that our Mills can be easily erected, we give a letter from Wm. Taylor, Esq., Proprietor of the "Elms Stock Farm."

BURLINGTON, N. J., June 20, 1877.
Eclipse Wind Mill Co., Beloit, Wis.—Your Mill was received in good order, and works perfectly; although my mechanics had never seen it before, they had no difficulty in putting it together, and they pronounce it the most complete and thoroughly constructed Mill we have ever had in this section. I am well pleased with the investment, and shall encourage others to try the "Eclipse." Very truly yours,
WM. S. TAYLOR.

Answers to C. V. De H.

EDITORS FARMER:—I send the following answers to C. V. De H.'s questions published in the FARMER of the 5th instant:

1st. Yes, simply turn the sod over and chop in your corn. It is all you can do the first year.
2d. Yes.
3d. From \$2.00 to \$3.00 per acre for breaking.

4th. The whole of Kansas is good enough.
5th. Not much in the eastern part of the State.

6th. No necessity of paying \$8 to \$10 per acre for wild land, you can buy as good land as the state affords at \$4.00, within 3 to 5 miles of good towns and Railroads in Miami county.

7th. Yes, if you will pay a fair price for labor.
Parkerville, Kansas. H. S. D.

ANOTHER.

EDITORS FARMER:—In answer to C. V. De H., of New Jersey, in the last issue of the FARMER, I would say to 1st, question: You can break and plant until the 1st of June. To 2d, question: You can, I think, hire all the help you want. To 3d, question: You can get breaking done for \$2.50 per acre. The planting would have to be done by hand; usually chopped in with an old ax, I suppose could be done for 75 cents per acre. 4th question: Lyon county is, we think, as good as there is in the state; being well watered and having plenty of timber, and soil that cannot be excelled in the state. To 5th question. There is no Government land in this county that would be desirable, but plenty of good land that can be bought from \$3.50 to \$10 per acre, within 6 miles of Emporia, the county seat of Lyon county. To 6th question: No, you had better pay from \$3.50 to \$10 per acre for good land near town and Railroad, than to go 10 or 20 miles from Railroad, and get your land for nothing. Here you could have the advantages of churches and schools and good society. To 7th question: Yes, I think you can hire all the men and teams you want.
Emporia, Kansas. W. B. ROSS.

ANOTHER.

EDITORS FARMER:—If C. V. De H., leaves New Jersey the 1st of April, he can get here in time to put corn in on sod if he comes by rail. If not, he cannot get the ground broke in time to plant this year, but it will be in good condition for next year; at the best sod corn is an uncertain crop. He can hire all the help he can pay for; teams and implements also. Breaking per acre is \$2.50 to \$3.00. Planting old ground \$1 per acre. Cross plowing sod, the same.

As to which is the best part of Kansas for wheat and corn raising, is a matter of opinion, but I think the southern part of the state the best for wheat, especially winter wheat.

There are Government lands open to settlement near towns and Railroads in the western part of the state. I would certainly say to any one having the means, take railroad land in preference to Government land, unless close to railroad.
KANSAS.

ANOTHER.

EDITORS FARMER:—In answer to C. V. De H., of New Jersey, I would say:

1st. Corn is and can be planted from April 1st to June 1st, the earlier the planting the surer the crop. The preparation is to turn over or break the prairie sod. No after cultivation is necessary or possible. If you want to sow wheat in the fall, sod corn don't pay.

2d and 3d. You can hire breaking done for \$2.00 per acre; planting by hand or horse planters is worth about 20 cents per acre.

4th. As to which is the best part of Kansas for corn and wheat, I don't believe that is settled satisfactorily to every body, but this part of the Solomon Valley is good enough.

5th. There are plenty of Government lands in northwestern Kansas, but not near railroads. Towns are built as soon as the country is settled and sometimes before.

6th. There are no good Government lands within 10 or 20 miles of railroads, except away in the western part of the state, on the K. P., and A. T. & S. F. roads. If you have money buy an improved farm; it will be the cheapest anywhere; if not, take a homestead, but don't run in debt for land expecting to improve and pay for it out of the crops.

7th. Yes, for cash you can hire all work done and at low rates, but if you expect to make farming a business and to live at it, you will have to own your teams and implements and work at it yourself, unless you have large capital and understand Kansas farming.

The weather is warm; on the 8th, 88° in the shade. Wheat is starting finely, having gone through the winter without material injury. Spring wheat mostly sown and ground in good condition. The question of voting Railroad bonds is now agitating this county. We hope to defeat any proposition for bonding the county. I am glad to see the course of the FARMER on the question of running in debt. If a farmer can't make his improvements from his farm and business he certainly cannot pay taxes on added improvements, interest on a mortgage and save enough to pay up the principal. Good buildings don't add much to the value of crops.
Cawker City, Kansas. W. A. H.

Apiary.

The Profits of Bee-Keeping.

In speaking of this great industry we know not hardly where to begin. There are now three or four Magazines devoted exclusively to the subject. Many bee-keepers' conventions, state, local and national, have been organized and conducted with enthusiasm. Not only is the consumption of honey greatly increased at home, but a large foreign trade in the article has sprung up which is checked only by the lack of supply. Thousands all through the land are awakening to this source of revenue otherwise wasted around them. There is great probability that ere long the market will be supplied with a superior article of sugar made from honey besides its use in its natural state. Already the honey statistics of our country are enormous. Bees were first introduced west of the Rocky mountains in 1853. Within these 25 years the name of California has become associated with immense quantities of honey. Mr. J. S. Harbison reached New York in 1876 with his great shipment of honey, produced in his six apiaries in San Diego county, California. This shipment consisted of ten car loads, each containing 20,000 pounds, or 200,000 in all. In Los Angeles county, we are told, that there is not less than 200 apiaries and over 12,000 hives, from which over 500,000 pounds of surplus honey are taken annually. The income of Mr. J. S. Harbison, derived from honey alone is said to be more than \$25,000 per annum, over and above all expenses. In the state of New York, Capt. J. E. Hetherington, of Cherry Valley, sold, in 1874, over 58,000 pounds of honey from his own apiaries; and Adam Grum of Jefferson, Wisconsin, as much more. Last year (1878), Mr. G. M. Doolittle, of Onondaga county, N. Y., reports that he secured 11,177 pounds of honey from 67 hives of bees, being an average yield of 1663 pounds per hive. Of two stocks worked solely for extracted honey, one gave 556 pounds; the second 301, and the third 286, making in all 896 pounds of box honey from three hives. Mr. Doolittle, the recipient of the medal for honey at the National bee-keepers' convention, in New York city, in October, 1877, thus closes his report for the year: "In conclusion we would say, that with a practical apiarist, bee-keeping is a profitable business, even at the present prices of honey. We have cleared nearly \$6,000 from our bees, free of all expenses, within the last five years. However, bee-keeping only pays when our pets are properly cared for, and if any one cannot spend the amount of time required he had better keep out of the business."—*Bee-Keepers' Text Book*, by A. J. King.

Horticulture.

Seed Men Take Notice.

I would be glad to know who can furnish pearl millet seed, in bushel packages for trial I notice considerable about its value in your journal, and have wondered that no one advertises the seed for sale.

JAMES HOLLINGSWORTH.
Kinsley Kas., March 7.

The Orchard.

March to the fruit-grower means work; and well directed work, as a rule, yields its reward. Planting left over from last fall can now have attention as soon as the ground is dry enough. Three prominent and important features in planting trees are: 1st, see that the roots are not cramped and bent, in order to save the removal of a few spadefull of earth; 2d, see that the tree is not set too deep: when the earth is all filled in and finished up the tree should not be more than an inch or so deeper in its new quarters than before being lifted from the nursery row; 3d, see that the earth is thoroughly settled and packed among the roots; aim to have the soil in contact with all the roots, and on all sides, or all around the roots.

A judicious shortening in of the branches is beneficial to newly-planted trees. One-year-old peach trees (and no intelligent planter will purchase them older) should have every side branch removed at planting, together with sufficient of the main stem, so as to leave it standing as naked stick, three or three and a half feet in height. Plums, apricots, cherries, dwarf pears and nectarines, of same age, subjected to similar treatment as the peach, at transplanting, are possessed by such process with a "policy of insurance on their lives" that yields handsome dividends to the planter.

If you have any cherry trees which you intend to graft this spring, attend to it during this month, as the operation will likely be attended with better success than if delayed. Though we have seen and in fact performed this operation on cherries when buds were bursting, with a loss of not five per cent. of the grafts set—this, however, we do not regard as being orthodox, and only mention it so that late-coming leisure may not preclude attempt at execution.

Keep the bark smooth and healthy on the fruit trees by washing with a mixture of lime and wood ashes—alaking the lime as for whitewashing, thinning with enough water so as to apply easily with whitewash brush, adding ashes sufficient to destroy the white glare of the lime when used alone. We would say here, however, that the addition of ashes is only a matter of taste—as we know, from oft-repeated trials upon our own trees, that whitewashing with lime alone answers a good purpose in keeping the bark of all kinds of fruit trees in nice, healthy condition. Where the bark has become rough and shaggy on large apple and pear trees, the washing should be preceded by a good scrap-

ing with a dull hoe, or other implement that will remove the dead and partly-loose bark without bruising the living.—*American Farmer*.

Miscellaneous.

Another Triumph of Harvest Machine Manufacturers.

The wire used in binding grain by the latest improved and best harvesters, bids fair to become a very serious obstacle to the use of wire as binding material, while numberless experiments and the expenditure of fabulous sums of money, had pretty conclusively settled the matter in the minds of the most skillful manufacturers of harvesting machinery, that no other substance was likely to be discovered to take the place of wire. Coris, straw, paper had all been tried with unsatisfactory results, while the careless and culpable practice of running the wirebands through the machine, when threshing, the wheat, resulted in serious injury to the bolting cloths of the millers, by cutting and injuring these costly articles. This evil had grown to be so serious that the millers were moved to take action for their own protection.

We copy from a St. Paul paper an account of their action in the matter: "The evil assumed such proportions that on the 13th of November last the Minneapolis Millers' Association adopted a resolution making a discrimination of ten cents per bushel against wheat bound with wire. This was the result of the carelessness manifested in the matter of removing the wire bands; and although the farmers had brought it upon themselves, the manufacturers of wire binders came to the rescue of their friends and patrons and invented a simple device for capturing the wire when passing through the mills. This device consisted of gangs of magnets placed in the spot through which the wheat passed, and they were found to be perfect and effectual in removing every particle of wire, as well as pieces of iron and steel of every conceivable description. The manufacturers, alluded to, sent some of these magnets to Minneapolis, where they have been put to the severest possible tests in several of the mills. That they did their work effectively will be seen by the following strong endorsement by the Millers' Association, which practically annuls the resolution heretofore adopted. A special committee having been appointed to investigate the working of the magnets, reported as follows, on Friday last:

"Your committee appointed to investigate the usefulness of magnets in extracting wire from wheat, ask leave to report:

"Magnets were placed in the Pillsbury, Washburn, Artie and Holly mills, and have been in use several days.

"Our opinion is that by their use the wire has been chiefly if not wholly removed from the wheat, and that in this way the evil of using wire bands can be lessened."

Weeds.

Professor Prentiss, of Cornell says:

The popular notion of a weed is that it is an entirely useless plant. The agricultural idea is that weeds are plants growing among our crops and encroaching upon them. A plant which under ordinary circumstances becomes a very troublesome weed, under other circumstances is a useful plant. And often plants which are carefully cultivated as farm crops so intrude themselves to the injury of other crops as to be most troublesome weeds. Hence, as a general definition, a weed is any plant out of place.

I have attempted a classification of weeds with reference to the kinds of crops, or rather conditions of soil which they infest:

First—Weeds of cultivated ground. These include those which are troublesome in corn fields, gardens, and with all hoed crops.

Second—Weeds of grain fields and sowed crops.

Third—Weeds of pasture and meadows.

Fourth—Weeds of waste places.

On investigation we find that nearly all are foreigners. Indeed, nearly all our plants of cultivated regions of America, like the inhabitants, have come from foreign countries. Of all our grains and prominent farm products only two, Indian corn and potatoes are natives of America. The rest have been brought here in periods more or less remote by people emigrating to these shores. Our domestic animals are all natives of other countries. For vermin (rats, mice, etc.) we are indebted to foreign countries, and of noxious insects we have only one prominent native—the potato beetle—with which you are quite too well acquainted.

Man, himself is a foreigner. We speak of the Irishman, or the German, or the Chinaman as foreigners, as though we had a native inheritance of the soil, but we are all foreigners, for the natives of America, the Indians, are nearly extinct. So American weeds are for the most part imported. Of the total 130 kind 110 are of foreign origin, and only twenty are indigenous to America. Of the fifty-four "weeds of culture" we find that forty-two are natives of Europe, one a native of tropical America, and eleven are natives of the United States, the single arrival from tropical America being pigeon weed, or what is called red root in Michigan.

It is a very troublesome weed in that state, but it is not so common here. Besides being hardy and vigorous, a plant to be as successful as a weed must be very fruitful and multiply itself rapidly. We find that a single plant of our worst weeds is capable of from 2,000 to 50,000 seeds. I shall give later, the number of seeds which single plants of the different kinds of weeds have been known to produce. The next quality which is of importance is facility for dissemination. Some are provided with wings

and pappus, as the dandelion, thistle, etc. These are carried long distances in the wind, and serve to spread their species over wide regions. Another species of weeds has its seeds provided with barbs, by which they cling to the clothing of men, the hair of animals, or even to the feathers of birds, and in this way they make their journeying to new fields and new regions. There are other miscellaneous provisions for disseminating weeds. The seeds become mixed with the seeds of useful plants, and in this way we plant weeds which ever after are pests to us.

Grasses.

Grasses require to be crossed quite as much as the largest and most attractive of true flowers. Singularly enough, we find that the distinction between the showy, insect-fertilized flowers and the unattractive wind-fertilized grasses is carried out even to the size and shape of their pollen grains. Those of the former are roughened over with surface projections, so as to cause them to adhere all the better to the hairy bodies of insects. Those of the latter are lighter in weight, smoother, and often flatter, so as to expose as much of their surface as possible, and thus help the wind all the better to blow the pollen about. The anthers or pollen bags of grasses are usually more pendulous than those of large flowers. More pollen is also produced—considerably more than can be utilized; but as its manufacture is of the easiest, that does not exhaust the plants. In this manner the possibility of some of the discharged and blown-about pollen taking effect is rendered certain. The amount of pollen thus poured into the atmosphere during June, by the grasses in our meadows, is such as literally to surcharge it. This it is which produces on sensitive nostrils the annoying complaint known as "hay fever." People suffering from it hurry to the sea-side or the mountains, somewhere where grasses do not grow, and where the atmosphere is freed from their pollen. We may notice in the flowers of grasses, also, how admirably the filaments which bear the anthers or pollen bags dangle outside the glumes, ready for the slightest breeze to blow them about. The filaments have the power of suddenly growing very rapidly while the pollen is ripening, so that the pollen bags are thus lifted outside the chaffy scales of the flower where they have hitherto been protected. Not less admirably adapted to wind-crossing is the pistil in the flowers of all grasses. Sometimes it is a living forked net feathered to its base, and everywhere covered with an exceedingly sticky fluid. Any stray pollen grain blown by the wind must inevitably be arrested by this subtle contrivance. Once made prisoner, the pollen begins to bud forth a tube which ultimately reaches the base of the pistil. Fertilization is then effected, the seed grain begins to develop, and after this manner the world gets its "daily bread."

Land for Potatoes.

One thing is certain, we can not get a great growth of potatoes, unless we have a rich surface soil. We can often get a big crop of clover when the surface soil is comparatively poor, provided the lower soil is rich from previous manuring, or from thorough cultivation. But this is not the case with potatoes. The surface soil must be rich in available plant-food. A clover sod turned under is a good foundation to work upon.

"Yes," said the Deacon, "a sod of any kind is good. It keeps the ground loose and moist, and the potatoes like to bury themselves in it. It is a real pleasure to strike a hook into a hill and pull up a dozen smooth, good-sized potatoes out of the decayed or decaying sod."

The Deacon is right. But in order to secure such a pleasure, we must look well to all the conditions. We want first land that is free from stagnant water. If the land needs draining, it is vain to expect a good crop. Second—We want a fine, free, mellow soil. In saying this, I do not mean any special description of land. Good crops of potatoes can be grown on a great variety of soils, ranging from a black muck to a heavy clay loam, or a blowing sand. But in order to raise good crops of potatoes on clayey land, it is necessary to get it into a fine mellow condition.

Third—We must plant early. And what is of still greater importance, we must keep the crop clean by thorough cultivation between the rows, and the occasional use of the hoe in drawing the soil around the growing plants, killing the weeds at the same time.—*Joseph Harris in American Agriculturist*.

Potato Fertilizer.

The potato is a potash plant, and the soil in which it is grown should annually be treated to a dose of a mixture of ashes, lime and salt; a little plaster added, will generally be made available by the plants. The mixture should, perhaps, be about in this proportion: Ten bushels of wood ashes, two to three of lime, one of plaster and three pecks of salt. Put a handful in each hill, lay the seed upon it and cover four or five inches.—*Farmer's Review*.

The Western Corn Crop.

In discussing the western management of the corn crop, the *Prairie Farmer* very properly says:

There are many of our best farmers who believe that a crop of corn may be raised more economically hand-planted, and once hoed by hand, than is accomplished with the average corn planter and straddle-row cultivator. Let us look for a moment at the work of the corn planters and the principle upon which many of them work. A groove is made in the earth, the

seed is dropped therein, and the wheels following press the whole solid. If the soil is somewhat wet the corn might almost as well lie in its grave. If the season is all right, that is if the weather continues moist and warm, the seed may pierce through to the surface. If dry weather then succeeds, the surface is baked hard about the growing corn. If rains and somewhat cold weather succeeds the planting the seed rots, or comes up so weak that its subsequent growth is slow and feeble. Meantime the weeds are growing in the endeavor to choke the corn. The next modification of the corn planter should be one that will enable the machine to open its trench not by pressing the earth downwards and sideways, but in such a manner as will leave the earth in a natural state. The next thing is to drop the seed so that it will not lie in a nest like a crate of eggs, but scattered in a bed at least 4 inches in diameter. The seed must then be covered in such a manner that while the earth lies pressed about it, the surface is light and mellow. Thus planted good seed will always germinate, unless the earth is completely saturated with water for a considerable length of time. It may be too cold for the seed to germinate at once, but if the land be in fair condition it will lie intact until the soil is warm enough to induce germination. This every market gardener knows who plants his extra early crop for green corn. The seed will often lie two weeks before germinating, and then come up evenly and strong. Some of the corn planters do work partially on the principle we have stated, but there is room for improvement.

Hen Lice.

My hens, henry and nests of setting hens became so infested with lice as to drive the hens from the nests, and fresh-laid eggs would have lice crawling on them. That was in 1873, and I have not seen one of the parasites on my premises since. I first tore out the round poles with bark on used for roosts, and put in basswood strips 1x2 inches, rounding the corners a little and saturated them with refined petroleum (common lamp oil), burned up all my nesting boxes and straw, sprinkled the oil all over the floor and sides of the henry, got new nesting boxes and put about one inch of sawdust in the bottom and sprinkled some oil on it, then put in clean straw on top; this I continue to do every spring before nesting-time. I also saturated the perch three or four times a year with oil, and I have not seen a hen-lice since. This six years' test has satisfied me of the certainty and safety of this plan as well as of its cheapness and ease of application. DAYTON SIGLER.
Crawford Co., Pa.

The Great Pool.

It has been decided by the Presidents of the great trunk lines that the present pooling arrangements on West-bound freights shall continue for five years from January 1, the percentages to be determined from time to time by Commissioner Albert Fink, to whom absolute power is given in the matter. The arrangement is a remarkable one, and the powers granted to the commissioner are despotic. The pool now in operation is maintained by a contract between the companies which allows 33 per cent. of freight to the New York Central, 33 to Erie, 25 to Pennsylvania, and 9 to the Baltimore & Ohio. After January 1, the percentages will be defined by the Commissioner.—*Exchange*.

It is shown by the action of the great rail-road companies that it is necessary to their proper management to have a commissioner with almost despotic powers. That commissioner should be a government officer, whose business should be to protect not only the railroads from one another, but to protect the people in their rights also, as between them and the railroads. Let equal and exact justice be done all parties, and a more healthy state of affairs would prevail.

A Cottonwood Grove.

I have a piece of breaking in Trego county that has come up thick with seedling cottonwood, and I am desirous of making a grove of them, and intend treating them in the following manner if I hear of no better way, viz: plow the land and then take the seedlings and set them in the rows five feet apart and plant corn in the rows.

Please let me know, through the FARMER, if this is a good way, or if there is a better one, and oblige, Yours, H.
Evanston, Illinois.

The plan will answer; but it will be less trouble and probably as much profit to allow the young trees to grow at will without plowing, and then thin out as they increase in size, when the thinnings can be used as poles, wood and other purposes.

Keelville, Cherokee County.

March 4, '79.—Wishing to obtain some information in regard to western Kansas, I will ask a few questions. Is there much good land in the state west of the meridian of Ellis county? Do you think there is rainfall enough in that part of the state to raise good crops? Can you give the quality of land in the following counties viz., Meade, Grant, Foote and Sequoyah, in southwest part, and Wallace, Gove and Trego in west part? Which do you think the best part to emigrate to, the west or southwest Kansas? Is there any timber in the said counties?

ROBT VESTAL.

Our correspondent asks us some difficult questions, some of them being of a purely local character, those persons only, who are residents of the particular neighborhoods enquired about, are probably the only ones who can give reliable

information. There is as good land west of Ellis as east of it, so say those who have settled in that region. There has been rain enough for two years past, so say settlers, to raise good crops. It has been formerly a dry region. No man can answer for the future. There is very little timber in the regions enquired about. Whichever part settlers locate in they invariably claim to be the "best part of Kansas," which being interpreted, must mean that all parts of Kansas are "good."

Roxbury, McPherson County.

March 6th.—The people of McPherson county were asked to vote bonds to the amount of one hundred and twenty thousand dollars to the A. T. & S. F. R. R., and did so in spite of the bitter opposition. Salina is our nearest market, a distance of twenty-four miles from this point. The coming road will bring a market within ten miles of us, and will be completed by Oct. 1. Now Mr. Editors we like your paper very much, and think you are sincere in your convictions, and have the good of the people always in view, yet we are disposed to think if you were in like circumstances, you would not write so much against a multiplicity of railroads, we do not expect to have a railroad near to every one; but a little nearer to all in our county.

There are twenty thousand acres of railroad land in our county now, and people coming west can do no better than to stop in our county.

Farmers are very busy sowing oats. We have not had any rain for a great while, but the wheat is looking very green and the heart of the weary farmer is gladdened thereby. We think like Emily that it is as much the duty of the women as of the men to set and cultivate small fruits.

KANSAS GIRL.

The editors of the FARMER do not write against a multiplicity of railroads, but lift a warning voice against farmers running themselves and counties in debt by voting bonds. It is sweet to go in debt but with pay day comes a day of tears. The eastern counties of the state are at present enjoying their season of tears. They were all happy on election day, and shook hands and congratulated each other when the bonds "carried." History repeats itself.

EDITORS FARMER: Where can I get Honey Locust hedge plants? None of your advertisers of nursery stock mention them. If they have them why don't they say so, and let the people know where they can get them?

Yours, G. W. GLICK.

Atchison, Kansas.

The Wines of California.

The wine trade this year will not be as large in quantity as usual, but the quality will be much superior to former years—the amount of grapes exported over our railroads everywhere and the quantity made into raisins has absorbed many hundreds of tons, and thus lessened the wine production.

The amount made this year will be not far from 5,500,000 gallons, and this by its great excellence will reflect much credit upon our home-makers and upon our state.

Speaking of tanning with the fur on, an English writer tells *The Country*, that he has a cat's skin, pliable as kid, free from smell, and the hair still clinging firmly, which, two years ago, was dressed according to the following receipt, which, he says, is equally safe and unfailing in all such cases: Nail a fresh skin tightly and smoothly against a door, keeping the "skinny side out." Next, with a broad-bladed, blunt knife, scrape away all loose pieces of flesh and fat; then rub in much chalk, and be not sparing of labor. When the chalk begins to powder and fall off, take the skin down, fill it with finely ground alum, wrap closely together, and keep in a dry place for two or three days; at the end of that time unfold it, shake out the alum, and the work is done.

The three states of Michigan, Wisconsin and Minnesota are about the only ones that have a supply of timber beyond their own necessities, and at the present rate of consumption, their forests are soon likely to be robbed of the riches which a few years ago were thought to be inexhaustible. At the present rate of demand six years will exhaust the supply of white pine that these states now afford. Many persons have relied upon the forests of Canada after our own are entirely despoiled, but the statements of experts go to prove that Canada has not a sufficient quantity to last us three years. In view of these facts, it seems to be the bounden duty of our Legislatures, both national and state, to take early and active steps to preserve our forests from useless destruction, and to encourage the growth of new timber land.—*Journal of Commerce*.

Brazilian Artichokes.

Now, that there is considerable interest being manifested in artichokes, and the hog cholera is becoming a terror among stockmen, the following scrap from the experience of a farmer, given in the *National Live-Stock Journal*, will be of interest to a number of our readers:

"I saw Brazilian artichokes advertised and recommended in the *Journal*; I sent for seeds and planted them, and now have three acres. I allow my hogs to have free access to them in their season, and I have never lost a hog with any disease. I have sold to my neighbors, who have lost some many others joining land with me have lost, some as high as 75 head each; and within four miles of me about 500 head of hogs have died this winter from some disease mostly called cholera and worms."

Tree Peddling.

And now draweth near the time for the land shark, commonly known as the fruit tree peddler. Last year we were offered trees of the dwarf kind for the small sum of 50 to 75 cents apiece and were assured they were cheap at that. Of course we paid tribute to his cheek and were taken in. At present we are offered standard trees of I. X. L. quality, for the small sum of one cent apiece. Of course a great many who will expend their one cent apiece for trees, time and labor in setting them out, and a good deal of time soon after, in saying bad words about the aforesaid peddler, but will cool down by the next spring, and be as ready to be gulled as of yore.

There are but few bearing apple orchards as yet, but a good many peaches. Berries of all descriptions, grown in the West, and do well here, especially raspberries. S. J. S.

Agricultural Experiments.

In reading your issue of February 26th I was much pleased to see the record of experiments made by Prof. Shelton, on the Agricultural College farm. I hope there will be many such experiments, and thoroughly published.

My experience with manure on Kaw valley land, in wheat culture, has been entirely different. In 1872, my crop on manured ground, with two bushels of seed per acre, doubled the yield of ground adjoining unmanured, with one bushel of seed per acre; all cultivated alike. The winter and spring of 1871-2 was very severe on growing wheat, and in my judgment, such seasons fully test the value to be derived from fertilizers and heavy seeding. You know last season was an entire exception to the general character of Kansas seasons.

In the matter of corn culture the results coincide with an experiment I made in 1869, but as that as well as last year were fine corn seasons, what would have been the result if the seasons had not been so propitious?

I hope Prof. Shelton will continue the same experiments for a term of years, and give to the public a like full and explicit report of results. I think the College farm should be used chiefly as an experimental farm. I hope the number of students attending the college will be largely increased, thereby elevating the calling of the agriculturists of this state.

Now, Mr. Editor, having read your last issue, allow me to say I call it the best issue put out by the Kansas FARMER office, and what a contrast in matter and style to the original 7x9 inch Kansas FARMER.

G. H. KUSHMORE.

Grantville, Kansas.

Tile and Underdraining.

This is a subject, the discussion of which I have not noticed in the FARMER, and as I consider underdraining of the greatest importance to farm interests everywhere, I wish, with your permission, to attempt to say something that may call the attention of those who are able to discuss it. It is not my purpose to attempt a history of the subject, but simply to refer to some of the most obvious and direct benefits to be derived from its practical application.

First, we remark, that the principle is applicable to all lands that will wash by heavy rains, and if we speak with reference to profitable production, it is indispensable; and in marshy districts it is essential to health. We have no lands that are so worthless and unhealthy on account of redundancy of wet, but what they can be rendered healthy and valuable by tile draining. Not only will they make the best meadow lands, but grain lands also.

But perhaps the greatest benefit and profit is derived from the draining of those fine, undulating farm lands that lie on the long slopes or inclinations met with everywhere in eastern Kansas, where the water, after heavy showers, must necessarily gather in such a body, before reaching the low ground or natural drains, that large gullies are washed through the land and the soil lost, and this I consider quite serious when we reflect that for all time to come those lands must be the basis of subsistence and prosperity of our race, and I do not believe that the man that is alive to religious duty can, with a good conscience, say, "Well, I don't care, so it serves my purpose." They are as much the gift of God as anything that we have, and should be transmitted to posterity in good condition. But then we take the position that duty is also interest, and as the horse pays an interest on good keeping, so does God's patrimony. This all intelligent farmers understand.

But another serious damage to the farming interest is the drowning of grain before it grows, and also after it is above the ground, not that it is often killed dead in the stock or stem, but that it is so stunted in its growth that it produces but little grain. Right here a vast amount of loss occurs that the farmer never realizes. When the young corn, for instance, is a few inches high, there comes a flood of rain that runs the ground together perhaps harder than before it was stirred, then a hot sun that scalds the corn by heating the water that stands around it; and though the land has fertility enough to produce sixty bushels of corn per acre, the farmer gathers thirty-five or forty, and cannot realize the fact that he has lost a third of the crop that he might have had if his land had been underdrained to take off the surplus water. I have had wheat and corn drowned before they sprouted, and that on dry land, both in Kansas and Illinois. E. TILTON.

Loulburg, Kansas.

"He was milking the river and fell in," is the explanation of the death by drowning of a milkman a few days since. See the pint?

Some women think they can do nothing without a husband, and when they get one they can do nothing with him.

Patrons of Husbandry.

NATIONAL GRANGE.—Master: Samuel E. Adams, of Minnesota; Secretary: Wm. M. Ireland, Washington, D. C.; Treasurer: F. M. McDowell, Wayne, N. Y.

EXECUTIVE COMMITTEE.—Hester James, of Indiana; D. W. Aiken, of South Carolina; S. H. Ellis, of Ohio.

KANSAS STATE GRANGE.—Master: Wm. Sims, Topeka, Shawnee county; Secretary: P. B. Maxson, Emporia, Lyon county; Treasurer: W. P. Popenoe, Topeka; Lecturer: J. H. Martin, Mound Creek, Miami county.

EXECUTIVE COMMITTEE.—W. H. Jones, Holton, Jackson county; Levi Dumbauld, Hartford, Lyon county; J. S. Payne, Cadmus, Linn county.

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TO OFFICERS OF SUBORDINATE GRANGES.

For the use of Subordinate Granges we have a set of receipts and order books, which will be sent to you on receipt of dues. Notices of New Elections, Feasts, Installations and a description of all subjects of general or special interest to Patrons.

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

To the Patrons of Kansas.

For the information of all, and for the purpose of saving time and correspondence, I desire to request those having in their possession copies of our Digest, to turn to page 90, and under "Form of Report" change fourth section by striking out all after the word "however," and insert the following, "that such dormant granges may be revived, and dues shall only be required from date of their revival."

Also change section six, on page 108, of Digest, by striking out all after the word "upon," where it occurs in the second line of said section, up to and including the word "reinstallment," where it occurs in third line of said section, and insert, in lieu thereof, these words, "such terms as may be prescribed by the grange."

WM. SIMS,

Master Kansas State Grange.

On a Safe Foundation.

Middlemen and other people who wish ill to the order, have been crying out that it is dead or dying. They were never more mistaken. The grange has been undergoing a sifting, not a crushing process. The chaff and tares have been thoroughly winnowed out, and only pure wheat is left. The renewed vitality of the order has been made manifest by the accession, since the first of January, of an unusual number of young and vigorous patrons and matrons. The disorganizing element has become extinct, and we believe henceforth that the grange will have a natural, healthy and vigorous growth. As a means of thorough and effective co-operation nothing like the grange has yet been invented. This is a fact which the young and progressive portion of the agricultural community are beginning to appreciate.—Farmers Friend.

Patrons Make Your Influence Felt in the Legislature.

The grange was the outgrowth of necessity, but in no particular more than as a means of giving practical effects to the sentiments of the great body of agriculturists. It has brought the farmer in immediate contact with the lawmaker. That the farming community, under the guidance of the grange, cannot effect legislation is simply ridiculous. Let the grange but put forth its influence and it can carry any measure through congress or the state legislature which it may desire. The reason is, that the grange is humane and patriotic in all its impulses, and in action commends itself to the thoughtful of every class. If the order in each state will make its requirements known to the legislature, and demand a compliance with them, none would dare resist. The legislatures are now generally in session. Let the mandates of the grange go forth at once.—Grange Advocate.

Grange Growth.

The Waco (Texas) Examiner and Patron says: The philosophy which estimates strength from numbers is a short sighted and badly informed philosophy. The strength of an organization or nation is in its spirit and material, and numbers is rather an element of weakness than of power. The contrast of the grange five years ago and now, is highly favorable to the present time. Fat persons are not always healthy persons; large armies are not necessarily strong armies; immense countries are not of necessity great countries, but the reverse is rather the truth. The nations and armies which have revolutionized the world, have without exception been small in number, but great in material, and China, to-day, is one of the weakest nations in the world, though numerically equal to a score of nations put together. The growth of the grange was a morbid, unhealthy growth, and while it seemed strong, it

was in reality an agglomerated mass of incoherent and unformed, untrained and unassimilated materials. It had the dropsy, fatty degeneracy of the heart, and apoplexy before it was out of swaddling clothes. It would have died in its infancy, but fortunately it had a strong constitution. Hard fare, plenty of thrashings, a rough experience, and hard work have taken the fat off it, strengthened its muscles, knit the bones, made its tendons of steel, and it is now a man, small, it is true, but wiry, vigorous, and with obstinacy to live forever. It has moral stamina, it has determination, it has every valuable quality that it did not have, and has lost every weakness that it did possess.

Farmers' Conventions.

There is a move being made by certain parties in Massachusetts to make it obligatory upon all the agricultural societies in the state to hold at least three farmers' conventions during the year, in order to become entitled to the usual state bounty of six hundred dollars. We have long felt that such conventions are the best schools that adult working farmers can attend during the comparatively leisure months of winter. The chief difficulty, at first, may be to find a supply of competent lecturers who can spare the time for attending and taking part in such conventions. Probably second or third-rate speakers would be much better than none, to lead off in the discussions. The chief aim of the managers of such meetings should be to encourage thought in the minds of those in attendance.—N. E. Farmer.

Why Advocate the Grange.

We advocate the grange not for the grange itself, but because it is the great school where farmers are brought together and where they will learn to think and act together; where, from all the various theories that will be suggested by the different minds of different persons, a well digested and more perfect plan will be adopted upon which they will act in concert instead of each pursuing for himself an individual and more poorly defined purpose. In the usual course of farmers there can be no harmony and very little progress.

It is an educational institution also. Farmers' sons and daughters brought up in the grange become familiar with the mode of conducting public meetings. Parliamentary tactics become instilled into their minds early in life. The young men learn to conduct debates and make men capable of serving their country in any capacity. This is a matter of great importance to the agricultural class. If we would have the agricultural interests of our country properly represented, it must be done by practical farmers, and in order for them to successfully cope with the experts of professions who make public life a study, they must be schooled to it. Rear up young men in the grange and they will feel as much at home addressing an assembly of their fellow men as they are at their own firesides.

Let the farmers of to-day rally around their grange standards and preserve them from wreck. Only a few years more and they will hand them over to their sons and daughters. It is the best institution for farmers ever organized, and the neighborhood which allows it to die out is retrograding in the calling which they are pursuing.—Dirigo Rural.

Agricultural Fairs.

Being asked to write a letter for your paper, it struck me that the resolution passed by congress instructing the committee on agriculture to inquire, What can and ought to be done by the general government to better advance, encourage and foster the agricultural interests? was a good subject.

As farming is the basis of this government, everything should be done that can be to advance and encourage it; and it strikes me there is a great deal of room for advancement, and one way to encourage it is through fairs or exhibitions, not as they are now conducted, but as we saw them in Ohio and Indiana twenty-five years ago—a fair where agricultural products, stock, fruit, etc., was shown in profusion and perfection, where farmers came to compete with farmers in producing the products of the soil, to show their fine, blooded stock, etc. Premiums were offered as an inducement. There was a healthy rivalry and great interest taken by the producers, and the non-producers came to see what was displayed, and fair time became a regular holiday, and was looked forward to with a great deal of interest by all classes, high and low, young and old, rich and poor.

How is it to-day? Fair day comes and goes, and many farmers give it hardly a passing thought. And why? Because horse-racing has taken the place of agriculture. Large amounts of money are offered to draw the fast racers, the object of which is to draw a crowd. Without the races you can't have any crowd, and consequently pay expenses. This is all folly. The races keep a great many people away because they don't approve of racing; others, because they can't afford to spend money to see them; and as the displays in which they are interested are allowed to dwindle into insignificance because there is no inducement offered for farmers and others to prepare and bring articles. Suppose we reverse our premium lists; what is the result? The fast horses stay away. Why? The premiums won't pay expenses; there's no inducement to fix up a horse, much less spare the time. Who stay away? The thieves, jockeys, gamblers, and their followers. What is the effect on the other class? The premiums are enlarged. Every farmer, his wife, son and daughter, becomes an exhibitor and competitor. They come to show what they raise and to see what others raise. This causes a rivalry. Each

tries to beat the other and win the prize. The grand result is agriculture is advanced and the object of the fair is attained.

Give premiums that are worth striving for; get the farmers interested so as to become exhibitors, and my word for it the non-producers will have curiosity enough to come and see the display if there is no race.

Make a premium list like this, for instance, and every farmer will compete: Best bushel of wheat, \$50; do. corn, \$50; do. oats, \$50; do. potatoes, \$25; do. onions, \$25; do. beans, \$25; do. five gallons sorghum, \$10; do. five pounds butter, \$10; do. gallon pickles, \$10; do. loaf of bread, \$10; do. cow or heifer, \$50; do. horse or colt, \$50; do. fattest steer, \$25; do. fattest hog, \$25; do. brood sow, \$25; do. brood mare, \$25; do. matched team, \$25; do. fastest walking team, \$50; do. plow team, \$50; do. plow-boy or man, \$25; do. plow, walking, \$25, etc.

I believe the gain in exhibitors, and consequently advancement of agriculture, will be the result of this kind of a fair. Give it a trial, agricultural societies, or farmers, organize a co-operative society. More anon. FARMER. Burlingame, Kansas.

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.

CORN PLANTERS.

CLIMAX TWO HORSE PLANTER, six chambers, heavy drop, 2000 TWO HORSE PLANTER, adjustable slide-drop. Both these planters operate perfectly with any of the standard check-rows. SUCKER DRILL, CAPITAL HAND PLANTER. All first-class (ILL.) MAN'G CO.

WATER! WATER! FARMERS ATTENTION

Having added to my deep well drilling machine, an auger and light drilling machine, I am now prepared to bore and drill wells, such as you need, and furnish pump and wind mill, putting them in position, ready for use if required. NO WATER NO PAY. Have had 14 years' experience, have put down over 300 wells, from 20 to 2,000 feet deep, securing water in every case; contracts taken at the most reasonable rates; if you want water, give me a contract and you shall have it as it is only a question of depth to secure it. Address C. B. SWAN, Box 592 Topeka, Kansas, or call on Spear & Willis, Carbonated Stone and Pipe Works, Kansas Avenue, Topeka.

BERKSHIRE PIGS COLLEGE FARM.

A grand lot 6 to 7 months old, of highly prized Sallie, St. Bridge, and Lady Leonidas families, and the get of such noted boars as British Sovereign II, 533, Cardiff's Surprise 1865, and others. These pigs we offer at very low prices. Also a few

ESSEX PIGS of the choicest blood. We also offer for sale a middle aged polled GALLOWAY bull, and two JERSEY bulls at surprisingly low prices. Address E. M. SHELTON, Superintendent Farm, Manhattan, Kansas.

GEO. M. CHASE, KANSAS CITY, MISSOURI, BREEDER OF

Thoroughbred English Berkshire Pigs.

—ALSO— Dark Brahma and White Leghorn Chickens. None but first-class stock shipped.

Poultry and Eggs.

For Sale a few Traps each of Dark and Light Brahmas, Buff Cochins, Brown and White Leghorns, also Aylesbury & Pekin Ducks, in pairs. Eggs from the above varieties and Plymouth Rocks, until July. Everything warranted Pure bred and of the best strains. Prices to suit the times. Address J. DONOVAN, Fairmont, Kansas.

DARK BRAHMA FOWLS FOR SALE.

Pure blood; imported. J. E. DUNCAN, corner Seventh and Fillmore Streets, Topeka, Kansas.

Solomon Valley Poultry Yards,

Eggs for Hatching from Partridge Cochins, also Fourteen other varieties of High-Class Land and Water Fowls. Send for Catalogue and prices to E. Z. BUTCHER, Solomon City, Dickinson Co., Kk. Berkshire Pigs from the noted Sallie stock.

1517 Head of the Famous Ohio Improved

CHESTER SWINE sold and shipped into the various States and Canada, for breeding purposes, in one year. A few years ago the dark hogs were in great demand, but within a year there has been a reaction. As a result, the following is a sample of what is being received from different parts of the country: OROVILLE, Beaver Co., Pa.—Jan. 30, 1879.—Mr. L. B. SILVER, Cleveland, O.: Sir—Please send me price list of your "OHIO IMPROVED CHESTER SWINE." I want to get a pair of pigs in the spring, or may be more than one pair. I think your breed of swine will take here now well, for the people are tired of the Black hogs. Yours, truly, B. D. DAWSON. Send stamp for description and price list of early spring pigs and fancy poultry. Address L. B. SILVER, Cleveland, O.

Berkshire Hogs.

My herd now numbers over 40 breeding sows and 8 boars. A good part of the sows are prize winners at the leading shows in this country. Canada and England are all select animals of fine quality, representing the best families of Berkshires living. I have paid higher prices than any other Western breeder. My herd has won more premiums than any other in the West. This year I won the grand Sweepstakes prize at the Kansas City Fair for best collection of hogs of any breed, against the largest show that was ever there. The boars in use now are Lord Liverpool, 221; British Sovereign, 533, and Conqueror, 233. The first was a prize winner at the leading shows in England and Canada; the second was never beaten in his class and won the first prize this year at the great St. Louis and Kansas City Fairs; the third won the grand Sweepstakes over all breeds at Kansas City in 1875, and at St. Louis in 1874. I have now on hand a fine lot of Berkshires of all ages for sale at reasonable prices, including young pigs just weaned in pairs not related, young boars ready for service, and sows safe in farrow. I ship nothing but first-class animals, and guarantee satisfaction in all cases. I have reduced rates for shipping by express. Send for new catalogue just out, free to all, and for prices or any other information, address N. H. GENTRY "Wood Dale Farm," Sedalia, Missouri.

Breeders' Directory.

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

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

O. BADDERS, Leavenworth Kan., Breeds Black Cochins & Brown Leghorns. Stock not surpassed in America. Send for descriptive Circular and price list.

J. FRY, Dover, Shawnee Co., Kansas, breeder of the best strains of Imported English Berkshire Hogs. A few choice Pigs for sale. Prices Low. Correspondence solicited.

SAMUEL JEWETT, Merino stock farm, Independence, Mo., breeder of Spanish Merino sheep, rams constantly on hand at reasonable prices. Call and see them or write for particulars.

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

HALL BROS., Ann Arbor, Mich., make a specialty of breeding the choicest strains of Poland-China Suffolk, Essex and Berkshire Pigs. Present prices 1/4 last card rates. Satisfaction guaranteed. A few splendid pigs, jills and boars now ready.

KANSAS HOME NURSERIES offer the largest assortment of HOME GROWN Fruit and Ornamental Trees, Vines, Roses, Orange Quinces, also choice new and rare varieties of Apples and Peaches, will deliver and offer trees in Topeka during the season. A. H. & H. C. GRIESE, Lawrence, Kansas.

Physician.

MRS. DEBORA K. LONGSHORE, M. D., late of Philadelphia, Pa., office and residence on Topeka Avenue, first door south of Tenth St., West Side.

Dentist.

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

Nurserymen's Directory.

A. WHITCOMB, Lawrence, Kansas. Florists' Catalogue of Greenhouse and bedding plants, free.

HENTIG & SPERRY, Attorneys at Law, TOPEKA, KANSAS. Practice in Federal & State Courts.

Durham Park Herds

ALBERT CRANE, BREEDER OF

Short-Horn Cattle

—AND—

Berkshire Pigs,

Durham Park, Marion Co., Kansas.

Catalogues free. The largest and best herds in the west. Over 200 head of cattle, and a like number of pigs. Prices Low. Address letters to DURHAM PARK, Marion County, Kansas.

Shannon Hill Stock Farm

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



WM. DAVIS, Breeder of

Pure Bred Poultry,

LEAVENWORTH, KANSAS. Light Brahma, Dark Brahma, Buff Cochins, Partridge Cochins, White Cochins, La. Fleece, White Dorking, Black Hamburg, Plymouth Rock, American Dominique, Brown Leghorns, Houdan, Greycocks, Pekin Ducks, Fantail Pigeons, Eggs from Buff Cochins and White Dorkings \$5.00 per dozen, Pekin Ducks \$2.50, all others \$2.00 per dozen. Send for Catalogue.

M. W. DUNHAM'S

OAKLAND STUD OF

PERCHERON--NORMAN HORSES.



WINNERS OF THE

Grand Prizes in Europe and America, Awarded Grand Medals by the French Government, and also Grand Medal Diploma and Special Report at the

CENTENNIAL EXHIBITION, '76

The largest and most complete establishment of the kind in America.

Since 1872

It has been replenished by

ONE HUNDRED & SIXTY-SIX

IMPORTED

MARES AND STALLIONS.

My Catalogue, with history and breed, sent free.

M. W. DUNHAM, 1111 N. 10th St., Topeka, Kas.

THE KANSAS FARMER.

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

TERMS: CASH IN ADVANCE.

One Copy, Weekly, for one year,	2.00
One Copy, Weekly, for six months,	1.00
One Copy, Weekly, for three months,	.50
Three Copies, Weekly, for one year,	5.00
Five Copies, Weekly, for one year,	8.00
Ten Copies, Weekly, for one year,	15.00

RATES OF ADVERTISING.

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

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

TO SUBSCRIBERS.

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

Fowls for the Farm-Yard.

As far as the measure of profit reaches in keeping fowls on the farm, and that measure is controlled very much by the care bestowed, it is as important to have the breed which, all things considered, will prove best. The best table fowl, we presume, all farmers will agree is the fowl they would prefer. They want first of all a fine, plump fleshy fowl. But among the multitude of contending champions of the poultry yard, whose opinion shall be taken? Every variety has its advocates who can give numberless reasons why their peculiar favorites should be preferred. But in matters relating to the table, or more properly the cuisine, the Frenchman's opinion stands as unquestioned authority. The short, thick, fleshy Houdans are the Frenchman's fowls. As a friend of this variety puts it, the Houdan is the "most comely, evenly-meated bird of the poultry yard—the short-horn of the chicken coop." A fowl that is plump and fleshy invariably sells at a good price and sells readily, and this is what the farmer desires in his surplus, after his own table has been supplied.

The spring is the time to set about making a flock which will give their owner the most satisfaction when the birds are placed on his own table, and the most profit when sent to market. And the way to achieve this desirable end with the least expense is to procure a year old Houdan cock in the spring. Select twelve or fifteen hens as near two years old as possible. Pullets of one year old and under lay the most eggs, but the eggs of well matured hens produce the hardiest and best developed chicks. Choose healthy, well formed hens with red combs, and place them in a yard with the cock where all other fowls—if it is determined to keep a larger number—will be separated from the selected ones. Use the eggs of these hens for setting all the brooders up to the last of May, and a fine flock of half breed Houdans will be the result of proper care and management, from which a flock of the best and earliest hatched pullets may be selected for next year, and the old flock sent to the pot; the cocks especially must be disposed of. The next spring add another full bred Houdan cock to your stock, and by adding a new bird to the stock every year, new blood will be infused and the injurious results of in-and-in breeding avoided, and in a short time a stock of the finest farm yard fowls will be formed, which will afford the owners both profit and pleasure.

Induce the younger members of the family, and especially the gentle sex to interest themselves in rearing fowls, by making a share of the profit an incentive. The boy who makes himself thoroughly master of the business of successful fowl rearing, will have mastered the fundamental principles of stock raising, and has only to apply the natural laws to be observed in managing one kind, to succeed with all kinds.

Always Ready to be Humbugged.

Last year it was Russian hybrid apples, at a dollar a tree. This year it is California fruit at \$2 to \$3 a tree, and we are informed that many thousands of dollars worth have been sold.

Our agricultural papers warn the farmers against being taken in by tree sharpers, and the horticultural societies publish lists of tried and approved varieties of fruits, adapted to the soil, climate and geographical position of Kansas, and the low price that such trees can be bought for, but all to no purpose; some oily tongued rogue comes around and tells the farmers a Munchausen yarn about hybrids, or California fruit, and asks ten prices for the stock he has for sale, and hundreds of farmers, who "don't feel themselves able" to subscribe a dollar and a quarter to a club for an agricultural paper, from which they will learn more in a year than they ever knew about farming and fruit growing, will find ten or twenty dollars for the sharper, and rush eagerly into this dead-fall set to catch fools.

One of the California fruit tree peddlers visited a large nursery in Iowa and inquired of the proprietor if he could furnish him with California fruit. The proprietor, being an honest man, informed him that he could not.

"Well, haven't you something that would pass for California fruit? Our customers want to be humbugged, and we must accommodate them." The nurseryman said, "No; we have nothing but what sells true to name." But all nurserymen are not possessed of such Roman

virtue, and California fruit trees are found, which afford the lucky finder a profit of thousands of dollars in a single season, drawn from the pockets of credulous Kansas farmers.

Next season it will be hardy oranges from the mountain regions of Southern California, grapes from the table lands of Mexico, Oregon plums, or some other equally marvelous product, and hundreds of gudgeons will bite as eagerly as ever. All that is needed is a change of bait, the same hook will catch the silly fish every spring. What the people want to protect themselves to be tricked and bamboozled out of all their spare cash by traveling sharpers. Grange leaders, intelligent farmers, will you not turn missionaries, and go amongst your weak brethren to save them from themselves?

The Present and Future of Silver.

A pamphlet of eighty pages, by George N. Jackson, published by Knight & Leonard, Chicago, and sold for 25 cents. This pamphlet is an argument on the free mintage of silver, or in the newspaper parlance of the day, "unlimited coinage of silver." Unlike the majority of the numerous currency discussers of the present time, Mr. Jackson deals less in invective, and directs his efforts to a logical consideration of this subject. To the extent that he confines himself to a philosophic inquiry after truth, he commands the attention of his readers. The war of words which has been carried on in the course of this financial discussion, has worked infinite harm, and served only to befog the issue. Men who knew nothing whatever of the subject they attempted to elucidate, were the noisiest.

The author of this pamphlet takes the position that money is subject to the laws of trade, and is influenced by supply and demand, and especially by demand, as all other articles of commerce or trade are, and to fully as great an extent. The scarcity of an article for which there is a general and steady demand, must surely cause it to rise in price, and if that demand can be supplied by some other article which will satisfy or answer the purpose equally as well, the first article will fall in price while the substitute rises to meet it, and thus the two articles, being used for the same purpose and answering that purpose equally as well, will equalize each other in value and that this equilibrium will be maintained between them by the laws of trade. Either of the articles being preferred for a season to the other, it will begin to rise in value, when the demand will lessen as the cost increases, and the cheaper rival will have the preference, and the demand being checked by the use of the substitute, it soon returns to its normal condition. There is no doubt about this being the fact in relation to all articles of merchandise, and if the advocates of a bi-metal, or "double standard," can convince the people that their theory is sound, there is no doubt that what is termed free coinage of silver, will be inaugurated.

Assuming that the laws of trade influence money not unlike they affect every other article that is bought and sold, bartered or exchanged, the next point of attack made on the gold or single standard theory, is that the supply of gold fails to keep up with the increase of every other product, and on account of that relative scarcity it is inevitably rising in value, it requiring a less quantity of gold yearly to buy a like quantity of anything else found in the markets of the world. These are the focal points of the author's argument, elaborated and fortified by citations and statistics.

Paper money is considered in connection with metal money, and condemned as a remedy for the evil; paper referring to a metal basis will be as dear as the metal while it is at par with it, and when by its increase the two part company, inflation and panic must soon aggravate the evil in place of producing a cure.

If the author's theory is correct that gold is actually rising in value on account of its demand throughout the world for use as money, and the fact that prices of everything continue to fall since resumption of specie payments in this country, gives weight to the argument, and if money is influenced to the same extent and in the same manner by the laws of trade that any product used by man is, why the persistent attempt to interpose obstacles by legislation to influence these natural laws? Bullion, of which coin money is composed, keeps its place quietly with all other commodities, rising and falling in the market in harmony with them; but when the government proceeds to cut up bullion into small pieces, putting 25 8-10 grains of gold in one and 41 2/3 grains of silver in another, and calls these pieces "dollars," the strife begins.

"Dollar" is a word without a definite meaning. It is an arbitrary term, and as absurd as arbitrary. Why these fractions? Trade is conducted smoothly by the device of the pound weight, the yard-stick and the gallon measure and their equal divisions, and the price of bullion is controlled and fixed in the market by these measurements. When government coins bullion into money it interferes with this comprehensive system which keeps it in unison with everything it is intended to represent, and by this conflict with natural law, produces confusion and clashing. If we had no coined money called "dollars," this confusion would cease; and in place of which a government certificate payable in—grains of gold or—grains of silver on demand, all the bullion, gold and silver in the country would do the duty that a persistent effort (but constantly failing) is trying to accomplish. The waste of coin by abrasion, is estimated to be 1 1/2 per cent. annually, which is constantly depleting the supply. This would be avoided. No one will have

metal if he can get a note which will purchase the amount it calls for when required.

With gold notes and silver notes calling for a decimal number of grains of either metal with no absurd "dollar" coins, creating confusion, the laws of commerce would adjust the value of money as they adjust daily the value of every article of trade, gold and silver bullion included.

We have taken up this pamphlet on silver, not for the purpose of confirming or denying the theory advanced by the author, but to point out his position taken on this important subject; and on the assumption that his theory is sound, the inquiry contained in our concluding remarks has been suggested. If the laws of trade will equalize the two metals if admitted to free coinage, and paper based on metal, being preferred by everybody, why disturb the working of natural laws by coining an absurd piece called a "dollar?"

First Biennial Report of the State Board of Agriculture of Kansas.

We are indebted to Alfred Gray, Secretary of the State Board of Agriculture for a copy of this valuable volume, and will, at an early day when we have had time to examine its contents give a more extended notice of the work. This elaborate report of the resources, industry and growth in population and wealth of Kansas, contains over six hundred pages with colored outline and county maps of most of the counties; colored diagrams showing the taxable stock wealth, comprising the assessed and true valuation of all property in Kansas, March 1, 1878; the state debt and appropriations; permanent school fund; annual county school funds; also, colored maps and diagrams showing rain belts and latitudes, the degrees of density of population, and much more valuable, curious and interesting information.

Probably no state in the union can show so exhaustive, varied and elegant an agricultural report, and the work reflects the highest credit on the able Secretary of the Board, Alfred Gray, to whose ability and untiring industry the state and the nation are indebted for this unequalled report. Everything worth knowing about Kansas will be found in this volume.

Marking Fruit Trees.

At the beginning of the spring planting season for fruit trees, it will be proper to say something about marking trees that there may be no trouble in future years in knowing the varieties, when they come into bearing, and also to know whether or not they turn out true to name as sold by the nurserymen. There are a number of devices for marking trees. Labels of lead and zinc are among the most approved, but all such marks are very uncertain to depend upon as a guide through a number of years. They are subject to destruction by a thousand and one accidents.

The only sure way to be able at any future time to know in a moment the name of every variety in your orchard and of whom the trees were purchased, age of the trees etc., is by a plat or diagram, containing number and name of each variety.

If the different varieties are set in rows running east and west, or north and south, the diagram will indicate them without fail. A chart of the orchard in the farm account-book is subject to less risks from loss than metal or other marks attached to trees by wire. A diagram should always be made when the orchard is planted, and room for marginal notes should be left where any useful or desirable facts might be recorded for reference in future years.

Concerning one G. E. Hutchinson, of No. 12 Union Square, New York, a Swindling Advertising Agent.

In every large city there are adventurers and swindlers, who live by securing under false pretenses of one kind and another advertising space in newspapers all over the country. The only capital these swindlers have is cheek. They secure from a business house an order to insert an advertisement in a certain list of newspapers for so much money. They agree to pay publishers whatever price is necessary to secure the insertion of the advertisement, collect the money from the advertiser, swindle the publisher and repeat the same game again and again, under a new name.

One of the sharpest of this class of swindlers we have had to deal with lately is G. E. Hutchinson, No. 12 Union Square, New York. He claimed to be the special agent of the "Home and Farm of Louisville and Farm and Fireside of Springfield, Ohio. He ordered considerable space in the FARMER, and has failed to fulfill a single promise he has made. He is a first class advertising dead beat, and publishers will do well to pass him round. We send this explanation to those advertisers whose contracts have not been carried out, and we suggest to them that a safer plan for them is to give their orders for advertising to reliable advertising agencies.

A Large Sale.

Mr. Robt. Henderson, living two miles south of Junction City, will sell at Auction, on Tuesday April 1st, 60 head of high grade cattle, of all sexes and ages, also, 10 head of horses and 5 head of mules, besides a large collection of farm implements of every description. Stock men should attend this sale, as it will be one of rare importance, on account of the rare quality of the stock, and the immense amount of useful property to be disposed of. Mr. Henderson has secured the services of Mr. H. G. Evans, of Topeka, as salesman, whose reputation as an auctioneer is a guarantee of a lively sale. He is making a specialty of stock and farm sales. Mr. Evans' card will be found in another column.

This trifling gift accept of me;
It is use I would commend.
In sunshine use the brushy part,
In storms the other end.
A well-fed hog roused up in his sty
And dropped a regretful tear—
"The Beautiful Snow has come," he said,
"And slaying will soon be here."

Horticulture.

The Shawnee county Horticulture Society, will hold its next semi-monthly meeting on the 27th inst., at 1 p. m., at Bradford Miller's office, in Dudley's bank, when committees will report on orchard culture, small fruit, its condition and prospect for this season, and ornamental, shade and forest trees and their culture.

It is very important that farmers should make some sacrifice, if necessary, to attend the meetings. There will be reports and conversations, on the cultivation on, and other points appertaining to, fruit growing. Fruit raising as a part of the farm economy may be made a considerable item of profit on every farm, but its cultivation and saving must first be understood. A half day monthly devoted to acquiring this knowledge will be time profitably employed.

A Fine Herd of Short-Horn Cattle for Sale.

It will be seen from our advertising columns that Mr. A. J. Bayne of Kentucky, is offering the farmers of Kansas an opportunity to secure some first class animals of good pedigrees, at prices farmers can afford to pay. Mr. Bayne's herd is to be found 6 miles northeast of Topeka. Examine his stock.

Pratt County.

Two families comprised the entire population of Pratt county, Kansas, 4 years ago last month. A census of the county has just been taken, and the population of the county, numbers 3500, with 27,858 acres under cultivation, and 831 householders. Pratt county is not yet organized.

Long Wool and Fine Wool.

Mr. W. J. Snodgrass of Butler county, Kansas sends us specimens of fine and Cotswold wool. The Cotswold sample was from the back of a ewe lamb and the fibre measures 13 inches. The specimens of fine wool are of very soft, fine and strong fibre.

L. A. D., of Woodhull, Chase county, Kansas. Your family physician will give you all the information you ask for, much more comprehensively than we could through the FARMER.

Ellwanger & Barry's New Fruit Catalogue.

This catalogue issued by Ellwanger & Barry, Mt. Hope Nurseries, Rochester, N. Y., consists of seventy compact pages, giving much information on the newer fruits, and furnishes select descriptive lists of the older varieties. Among the newer sorts, with regard to which full information is given of all that is known to the present date, are the Waterloo peach, which has ripened a week or ten days before the Amsden; Briggs' Red May and Conkling peaches; Fredrick Clapp pear; Moore's Early, Monroe and Rochester grapes, the two last named seedlings raised at this nursery; and the Sharpless and several other new strawberries. The extensive specimen and fruiting grounds connected with many interesting results in testing varieties, and readers who procure this catalogue may obtain from it much useful knowledge on the subject not to be had elsewhere.—From the Country Gentleman, Sept. 12, 1878.

A Choice Pair of Berkshire Pigs to be Given Away.

We will give a choice pair of Berkshire pigs to the person or firm sending us the largest number of subscribers by May 1st, 1879.

These pigs are No. 1, pure bred Berkshires bred by L. A. Knapp, Esq., of Dover, Shawnee county, Kansas, and are presented by him to be competed for by the agents of the FARMER.

We have received a second letter from Mr. B. M. House, of Newton, on railroad transportation, etc., which is but a repetition of his former letter, published recently in the FARMER, with a change, in some respects, of phraseology. He does not shed any new light on the subject; in fact doesn't seem to possess a particularly clear vision himself. Neither the interest of the railroads nor our readers would be advanced or abridged by his publication.

Why be distressed with headache, low spirits and nervousness when Ellert's Daylight Liver Pills will surely cure you.

Peevish children have worms. Dr. Jaques' German Worm Cakes will destroy the worms and make the children happy.

For every ache, pain and bruise on man or beast Uncle Sam's Nerve and Bone Liniment is the balm. Sold by all druggists.

Uncle Sam's Harness Oil put on your harness, will make the leather look new, and keep it soft and pliable. Give it a trial.

For pamphlet on electric treatment of chronic diseases with electricity, which will be sent free, address the McIntosh Electric Belt and Battery Co., 192 & 194 Jackson street, Chicago, Illinois.

Electric Belts.

A sure cure for nervous debility, premature decay, exhaustion, etc. The only reliable cure. Circulars mailed free. Address, J. K. REEVES, 43 Chatham Street, New York.

An Article of True Merit—"Brown's Bronchial Troches" are the most popular article in this country or Europe for Throat Diseases and Coughs, and this popularity is based upon real merit. 25c. a box.

Mother, when your dear baby suffers in teething, use Dr. Winchell's Teething Syrup. It regulates the bowels, soothes the pain and brings natural sleep. Sold by druggists at 25 cents a bottle.

"A stitch in time saves nine" is not more true in mending clothes than in getting farm stock through the winter. An economical and sure help is Uncle Sam's Condition Powder. It restores the sick, strengthens the weak, improves the appetite, and will keep the stock in a thriving condition, for it supplies the valued qualities in grass. Sold by all druggists.

Bogus Certificates.

It is no vile drugged stuff, pretending to be made of wonderful foreign roots, barks, etc., and put off by long bogus certificates of pretended miraculous cures, but a simple, pure, effective medicine, made of well known valuable remedies, that furnish its own certificate by its cures. We refer to Hop Bitters, the purest and best of medicines. See "Truths" and "Proverbs," in another column.

Ladies, Delicate and Feeble.

Those languid, tiresome sensations, causing you to feel scarcely able to be on your feet; that constant drain that is taking from your system all its former 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 of periodical pain are permanently removed. Will you heed this? See "Truths."

Man, with all his endowments, is in many things most foolish. He will give all that he hath for his life, but is less and indifferent to his health. He will grapple a thief who steals his purse, yet will dally with a cough and cold and finally go into consumption, when such a sure remedy as Ellert's Extract of Tar and Wild Cherry can be easily obtained. It performs rapid cures, gains friends at every trial, and is invaluable in bronchial and lung diseases. It is a safeguard for all, from the babe to venerable age, and health will be restored by its timely use. No family that has used it will be without it. Sold by druggists.

8 and 9

Eight and nine per cent. interest on farm loans in Shawnee county.

Ten per cent. on city property.
All good bonds bought at sight.
For ready money and low interest, call on
A. PRESCOTT & CO.

For Coughs, Colds, Bronchitis and Consumption, use Marsh's Golden Balsam, the great throat and lung medicine. There is nothing equal to it: Try a sample bottle—price 10 cents. Two doses will benefit. A large bottle will do wonders. Regular sizes 50 cents and \$1. For sale by Swift and Holliday, Topeka, Kansas, and druggists everywhere.

Chew Jackson's best Sweet Navy Tobacco.

Money! Money!!

If you wish to borrow money upon Real Estate, and get your money without sending paper East, and at reasonable rates, go to the KANSAS LOAN AND TRUST CO., Topeka, Kansas.

Horrible—I suffered from Catarrh for 30 years; was cured in six weeks by a simple remedy, and will send the receipt free to all afflicted. Address, with stamp, Rev. T. J. Mead, Syracuse, N. Y.

Consumption Cured.

An old physician, retired from practice, having had placed in his hands by an East India missionary, the formula of a simple vegetable remedy, for the speedy and permanent cure of consumption, bronchitis, catarrh, asthma, and all throat and lung affections, also a positive and radical cure for nervous debility and all nervous complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellows. Actuated by this motive, and a desire to relieve human suffering, I will send, free of charge, to all who desire it, the recipe, with full directions for preparing and using, in German, French or English. Sent by mail by addressing with stamp, naming this paper, W. W. Sherar 149 Powers' Block, Rochester, N. Y.

LADIES OF LIMITED INCOMES will find it a great advantage to be able to plan all their purchases for the spring season at one time; a dollar spent judiciously, often accomplishes more real work than two dollars expended on the spur of the moment. To aid its subscribers in thus systematizing their shopping appears to be the chief object of *Ehrich's Fashion Quarterly*, of which the spring number is now on our table. Everything that lady can possibly need for the spring season has a place under its proper heading, where it can be found without difficulty, and where the reader can see at a glance, what changes fashion has decreed, what stuffs and tints are likely to be most worn, and at what price her wants can be supplied. The literary portion of the magazine is very praiseworthy, containing interesting and instructive articles on dressmaking, housekeeping, etc., poems, humorous and entertaining sketches, chit chat for the little ones, etc.

Published by EHRLICH & CO., 287 to 295 Eighth avenue, N. Y., at 50 cents a year, or 20 cents a single number.

The U. S. Signal Service.

Gradually, the wild ungovernable forces of nature are, through science, made of use to man. Following in the wake of the ingenious inventions for the use of steam and electricity, comes the organization of the U. S. Signal Service. Is it not wonderful that a system could be originated and perfected whereby an operator can accurately predict the weather of a distant locality? And yet experience proves our "storm signals" to be reliable. Equally great are the advances made in the science of medicine. Step by step, uncertainties and doubts have yielded to absolute certainty. The discoveries of Harvey and Jumer have been succeeded by the Golden Medical Discovery of Dr. R. V. Pierce. No longer need people despair because some Physician has pronounced the lungs unsound. Hundreds of testimonials are on file in the office of Dr. Pierce from those who had abandoned all hope, and had been given up to die by Physicians and friends. Incipient consumption, bronchitis, and scrofulous tumors, speedily, surely, and permanently, yield to the healing influences of the discovery. If the bowels be constipated, use Dr. Pierce's Pleasant Purgative Pellets. For full particulars, see *Pierce's Memorandum Book*, given away by all druggists.

secure your choice at prices to suit the times. Must sell by April 1st, or move the stock. Yours, &c.

A. J. BAYNE.

See our very Low Prices. 3 Horse Power Engine and Boiler, \$240. 4 Horse Power Engine and Boiler, \$280. 6 Horse Power Engine and Boiler, \$340. Send for descriptive Pamphlet, and write manufacturer for further information.

James Leffel & Co
Springfield, Ohio.

Farm Letters.

From Butler County.

In regard to the south part of Butler county, Kas., I think we have a good farming country that cannot be beaten for produce of all kinds. It lays very nice for farming, not too flat nor too rolling; where it is too flat, it will do for meadow, and where it is too rolling and stony it is good for trees, forest or fruit. I have been living in this part of the county for four years, and have not had a failure in crops of any kind during that time. Corn and wheat are the main crops, as this is a new county. Corn on the upland will average 40 bushels to the acre, if rightly tended, and wheat will average 18 bushels to the acre, and as the ground gets older or in better cultivation, the wheat will be better. It seems that the ground has to be cultivated about five years, before the soil is well rotted, and after that it is all right for a crop. I raised last season on upland 40 bushels of millet to the acre, which I think is hard to beat without any extra cultivation. Potatoes do well in this soil. They grow very large and yield well. Garden vegetables do very nicely. I pulled a beet two seasons ago that measured twenty-one inches in circumference, and last season I saw one that would measure one-third more. Apple trees do well here and grow very fast. Peach trees do well. We had plenty of peaches last season, and I think we will this season. There is some land that is not settled upon yet, which can be had for \$1.25 per acre, by living on the same for one year. There is no homestead land in this part of Butler. A man can purchase a farm that is in cultivation, really cheaper than he can improve one. I know of one that can be had for \$1,400; there are 100 acres in cultivation, orchard and forest trees and other improvements. It is where Pine Grove P. O. is located. A good site for a town. There are also other farms for sale at all the way from \$500 up to \$4,000 or \$5,000. It does not look as though the country spoke very well for itself, when there are so many that want to sell, but that is not the cause. The cause is hard times. A man with a little money can do well here. J. W. SEAL.

From Lincoln County.

Feb. 11.—The FARMER reaches us regularly, think I will be successful in raising a club. For the last two weeks I have been canvassing in the southwest part of Mitchell county, selling fruit trees, and was surprised at not finding one family in two weeks that were taking an Agricultural paper. Nearly every family takes their own county papers and some extra papers. It is true the papers from where we are born and bred are read with interest, yet if I must part with any I will not part with the FARMER, and as I have always a copy or two of the FARMER with me in canvassing, I try to introduce it, but as I am a stranger to nearly all, if I would even try to get them to subscribe they would think me swindling.

They all say they would like very much to have a farmer's paper, and always put the question: Which is the best kind of summer, autumn and winter apples. I still tell them that the best and most reliable information we have is from the eastern counties, through the Kansas FARMER, because we are all new settlers and know not what to recommend. Would be pleased to have our eastern county brethren quote from their experience a list of the summer, fall and winter apples, also peaches, pears, cherries, grapes, plums and all kind of small fruit; also most valuable native trees for timber and variety, and easily multiplied.

Quite an excitement has been created about coal in our vicinity. Our neighbor living on the Spillman creek has opened a 14 inch vein of coal, pronounced good coal for this county which sells as fast as taken out, at \$4.00 per ton, and gives good satisfaction. The coal was discovered in the bed of the creek. Many more would like to prospect for coal, but as it requires means, we are unable. Would the Legislature provide a plan to prospect for the whole state and let the expense, wherever coal was found come out of the first coal produced for opening the vein? On the 24th of January hogs sold at \$1.80 gross; now we are offered \$3.50 gross. Quite a rise.

Much obliged to C. W. for the information about the time for sowing Buckwheat.

As my wife was tickled at Mrs. Bucknell's way of making and salting sour-kraut, I will ask her to give her experience because she makes about a barrel every year, to use and sell.

Several lists of trees have recently been published in the FARMER giving the desired information.—[Ed.]

From Johnson County.

March 9th.—After the long, hard winter, spring has appeared with busy days and that good lively go ahead to provide for another year. Wheat is looking well, although not much sown here. Our soil is too light for wheat; we don't raise it with good success here; the frosty days in the spring heaves the ground and destroys the crop. Our principal crops here are corn, oats and flax. Corn 22 cents per bu., oats 20¢/22 cents, flax seed, \$2 per bu., and 30¢ for the seed, and not sure to get it when we go. From present appearances one-half the demand cannot be supplied with seed; if the seed can be procured, there will be an immense average of flax sown in this county. Corn yields from 35 to 45 bushels per acre, and most of the crop in this neighborhood on hand. Hogs about all shipped that are fit for market. Stock hogs, a small supply on hand for the coming season; some cholera still among them.

I see in the columns of the FARMER that Shawnee county is about to squeeze some of the corn into juice or toddy. Let her do this and some more counties do likewise; evil and good are always together; never a thing so good but what it has its evil with it. If we can manufacture our grain at home, why not do so? We must and do pay for transporting our grain east to be manufactured, and for bringing the product back again, and so long as we do this we can't be very prosperous. If we leave some of the profit at home we must surely make a gain thereby. If my neighbor makes a fool of himself, it doesn't follow that I must do likewise. Kansas has plenty of whiskey now, and I don't see why it should be any worse if she makes it. (Which is altogether a piece of very shallow reasoning.)

As my neighbor is mine, saith the Lord, I will repay. A community which deliberately and systematically sets about debauching its citizens by the erection of distilleries, will not create wealth, but paupers, criminals and ignorance; a low standard of morals and a low standard of intelligence. This is the promise of the text, which I desire to be redeemed.—[Ed.]

I this day planted my fruit trees. The ground is in good condition for the purpose. I plant them 18 feet apart, each way; I have a pail of water with me and dip the roots in it as I put them in, having the hole large enough to lay

the roots in their natural position, then fill up with fine dirt and tramp well, and all is done. It may not be out of place to add that I give my trees a slant to the south; if planted straight the wind will blow them north and the sun scorch the trunk. Now I want to sow the orchard in oats; is that a good plan? Can some of the readers that have had experience tell me? L. W. MOLL.

Small grains should not be sown in orchards; and 18 feet is too close to plant apple trees. Thrifty trees will soon require a space of twice 18 feet between them.

Agnes City, Lyon County.

Feb. 28.—Winter has departed and spring is here. Some of the farmers are still husking corn, others are plowing for spring seeding. Stock has gone through the winter in good condition. Settlers are coming in more rapid than ever, since the warm weather has set in. At the rate they are settling up the Kaw reservation it will soon all be taken.

I will give you my mode for preventing a cow from sucking herself. Take a strap or a rope and fasten it around the neck and the same around the loin, then get a stick or a round hickory pole, make a hole in each end the same as a crowding stick, and fasten one end to the strap from the neck, attach the other end to the strap from the loin, so that the stick will swing free and the cow will give no more trouble. I would like some of your correspondents to tell me what is the matter with my pig. He is a thoroughbred Berkshire, six months old. Until the last six weeks he was in as good shape as could be wished; since then he has been so lame and stiff in his legs and feet, that he is in great pain whenever he attempts to get on his feet, some days he is better than others, some fever in the feet. Acts as if he had the rheumatism. Any information would be gladly received. E. C. EDWARDS.

Harris, who is authority on the pig, says the remedy for rheumatism is Rochell salts, good treatment and liberal feeding. Give the salts for two or three days, say 1 oz. a day for a 100 pound pig, and less or more according to size; and then omit them for a few days.

From Butler County.

March 3d.—We have had a very severe winter here, but stock of all kinds look well up to the present date. Most of the fat hogs have been marketed, but stock hogs are plentiful; fair grades are selling at \$2.20 per 100. The grass-hoppers did one good thing for Kansas—they made away with the prairie rooters, that the country was overstocked with; and in their place now you can find just as fine hogs here, of the Poland China and Berkshire breeds, as can be found in most any country. Plowing has commenced for spring crops and the ground is in splendid condition. Corn is about all gathered and sells at 15 to 18 cents per bushel; oats, 18 cents; potatoes, \$1.00 do., and scarce at that; farm hands receive from \$14 to \$15 per month; girls get \$2 per week; butter sells for 15 and 20 cents, but has been down to 10 cents for a long while; cheese sells at the store for from 15 to 20 cents. There is a good opportunity in this neighborhood for a cheese factory, that is, for a first-class article. There is plenty of poor cheese on the market, but a No. 1 article would always bring from 10 to 12¢ per pound. We have a good school house in this district in which meetings of all kinds are held—Sunday School, literary and preaching by several denominations. Unimproved land can be purchased here for \$5 per acre. If anybody wants to know about Butler county, by enclosing a stamp and his address, I will give him what information I can, freely. I am nothing but a plain farmer, and have not a foot of land to sell, but I know there are a great many people East who would like to hear from speculation persons, who are not engaged in speculation.

Butler county has organized a Horticultural Society, and it has every promise of being a success.

I would like to ask the members of the FARMER club, if any of them have ever raised the Hews or Virginia crabs for cider. Will some one please give us the experience.

When you buy a new tub or bucket, give it a good coat or two of linseed oil on the inside, and you will be surprised to see how much longer it will last and not warp. Please send me a copy of your paper and oblige

HARVEY FENTON.

From Butler County.

We only came here last July, yet I cannot resist the temptation to write a few lines to THE FARMER, to let L. Donmeyer know that there is a cure, as well as a preventive for chicken cholera, besides knocking them on the head, as you advised him to do. After we came here we bought a dozen hens. We made a good warm house for them and fed them well all through the cold weather, and they repaid well for the care bestowed upon them. There was only three days during the whole winter that we got no eggs. Finally cholera made its appearance and as we live so far from town, it was impossible for us to get any medicine for them. One day I found Mrs. Reitz very sick with it, and as she was one of my best layers, and a special favorite, I couldn't think of letting her die without making any effort to save her. We had nothing to give her unless it was concentrated ipe or Perry Davis' pain-killer. We concluded to give her some of the latter. My husband brought her to the house, but said: "Just let me cut her head off, she is so near dead it is no use wasting the medicine on." I said, "No, no, let me try it just this once; I can't let her die without trying to save her," so I gave her two doses that evening, and two the next morning, and that cured her—just four doses. Ten drops are sufficient for a dose, and is best to give one every hour, for from four to six hours. I put it in a spoon and filled it up with soft water and held her head firmly and poured it down her throat. The preventive is pokeberry root; a friend brought us some after I began to doctor mine. We cut it in small pieces and put in the trough we have for them to drink out of, and there has been no signs of cholera since. We keep a little of the poke root in their trough all the time. If you can't find the roots you can buy it at a drug store. Perhaps every one don't think as much of their chickens as I do of mine and won't care to try the pain-killer. I have only nine left out of the one dozen, and they all look hale and hearty, but I have some young ones that will soon be hens. I have my tomatoes planted, and they are coming up nicely. The farmers are all plowing now. It has been a much harder winter than we expected to see in "the Sunny Southern Kansas," we heard so much of it in the east, but to-day is so warm and nice that it makes me anxious to get to work in the garden, as I haven't made but one little garden since the days of childhood, when I used to transplant ragweeds for tomatoes and burdocks for beets, and that was last spring, but

we didn't stay to get much benefit from it. I would like to tell you about our cow and how we manage her, but I fear my letter is already too long.

If this don't find its way into the waste basket, I would like for some of your readers to tell me how to pickle tomatoes to keep for winter use, as I'm very fond of them, but don't know how to make them or put them up to keep. N. B. L.

[We hope Mrs. L. will favor THE FARMER with another letter soon.—Ed.]

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.

TRUTH IS MIGHTY!
Send your name, address, and a recent photograph, and we will send you a copy of our new book, "The Truth is Mighty," which contains the most complete and reliable information ever published on the subject of the human mind, and the power of suggestion. Address: THE TRUTH IS MIGHTY, P. O. Box 100, New York, N. Y.

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WANTED!

One or more partners with capital to raise stock, &c. See KANSAS FARMER of Feb. 18th—Co-operation—address B., Box 216, Troy, Kansas.

FLORAL GUIDE FREE Tells How to Grow Flowers and Vegetables. Best Seeds ever grown; fresh, reliable, and pure; sure to grow. Large packets, low prices, liberal discounts. Illus'd Guide, 38 pp., free. Address COLE & BRO., Seedsmen, Pella, Iowa.

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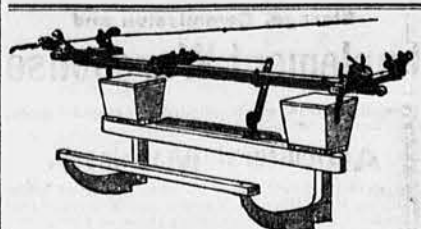
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Use of Wire in place of a rope, and that one Wire will out-last two ropes. The Wire will not STRETCH and SHRINK like a rope. The Wire does not cross the machine. There is no side draft. Will plant more perfectly, and more in check. The operator does not have to get off the machine to throw the Wire off at the end of the field. Will work on any planter, as now made. It is very easy to work and understand. Is durable in all its parts.

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No sharp points in the flesh to cause irritation and soreness, as in case of rings that close with one joint in the flesh, and produce soreness of the nose. The Champion Hog Ringer speaks for itself in the above cuts.

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