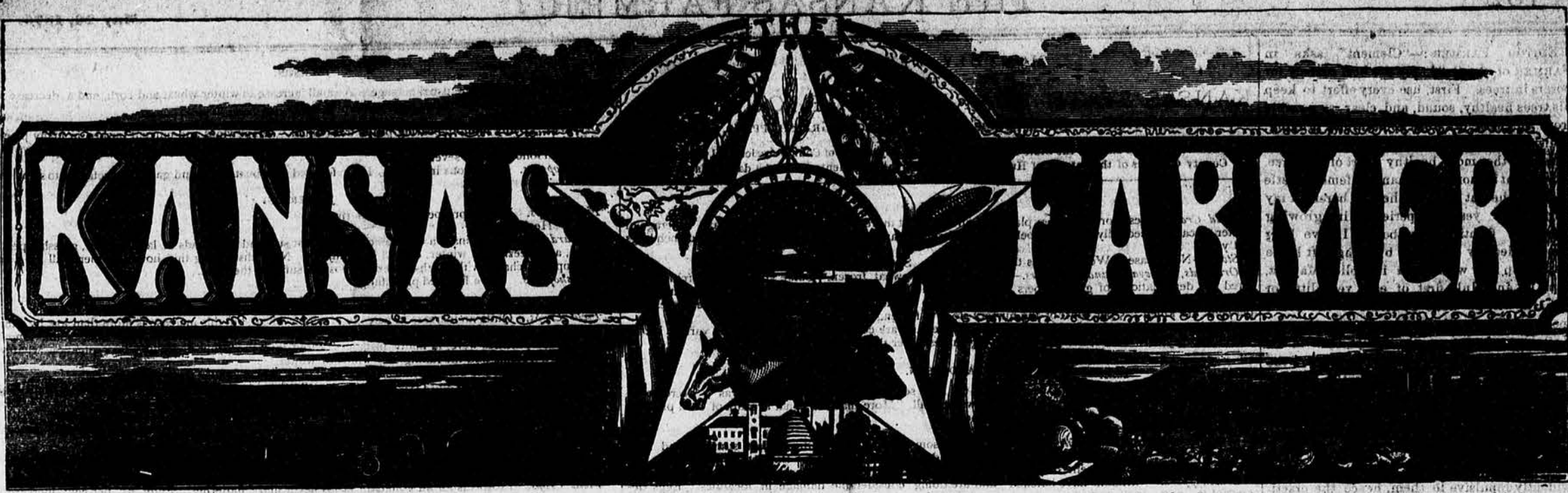




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The Kansas Farmer.

J. K. HUDSON, Editor & Proprietor, Topeka, Kan.

Agriculture.

GROWING CORN.

DEAR FARMER:—I am a reader of your excellent paper, and as the subject of corn raising is one I have made a study for forty years, I will give some hints which may be of use to young corn growers.

The ground should be plowed deep, and made fine, and then planted generally three inches deep; harrow before the corn is fairly up, regardless of rows or hills. When the corn is from four to six inches high, harrow again with a light sharp V harrow, with the wide end forward, and a tongue or pole to keep it steady, and make every tooth cut for itself; also, one handle at the hind or narrow end to keep the hind teeth from tearing up any corn, and, also to jerk up and let stalks out while it is moving.

Corn thus managed will not need plowing until it is twelve or eighteen inches high; then tend, the shallower the better. Right here is where we make a great mistake. Corn roots will run from sixteen to twenty-five feet. In a wet year they run near the surface, in dry, they strike down deeper, but never so deep but that a common cultivator will cut the most of them off. Now it has been found by experience, that these long roots are necessary to the perfecting of the corn: they convey the oil, starch and sugar to it. The chinch bugs took those materials on their way up and left us little but bran, last year. I know, by experience, that it is hard to make one who has followed his beautiful, bright polished cultivator, and seen it make the ground so fine and nice, and the weeds so nicely hidden, it is hard, I say, to make him believe that that is not the best way. It is true, that in a good corn season, when there is no drouth, but timely rains, you can raise even larger fodder, but never as much corn, by breaking the roots off.

I tend my corn but twice after it is up, once with a harrow, then I lay by, by tending about one inch deep, and destroying about all the weeds with a scraper, and when my neighbors corn is curling up with drouth and heat, mine is still looking fresh. Tending shallow does not lift the weed seeds to the surface to grow, so the ground remains clean.

I used to feel a great interest in labor-saving farming implements, but I have come to the conclusion that the producer makes no more. Monopolies take all, but what will just keep us alive. We must keep up with modern improvements, but introduce no new ones until things are fixed so we can reap a part of the benefits.

When I sold corn from sixteen to eighteen cents per bushel, it was eaten at 75 to 80 cts. per measured bushel of 52 to 53 lbs. per bushel in the New England States. So, you see, the cheaper we can raise it, the more the middle men and railroads get.

Yours, etc.

P. W. R.

Gardner, Kan. May 9th, 1875.

EDITOR KANSAS FARMER:—There being a lull in business this A. M., I picked up my new FARMER of the 12th, for the special object of seeing the reports on ye grasshopper—the result is not pleasing, but by no means discouraging.

The letter of John B. Worland, from Kansas City, deserves the attention of farmers; it seems to me a feasible plan for meadow and unjointed grains.

Your leader, "Don't Mortgage the Farm," I specially want to emphasize, it will bear repetition once a month for the next two years. If there is one blunder above another ever made by the farmer, it is the mortgaging of the homestead. Was it Talleyrand, who said, "That a blunder in politics is a crime?" Mortgaging the homestead is a worse crime.

As you know, I have had good opportunities for observation in these matters, allow me, if your space will permit, to tell three incidents illustrative of this crime.

A friend of mine, and a farmer, who was, in consequence of his intelligence, experience and knowledge of the world, a leader in his township and the region all around, owned a fine farm, nearly all hedged, with a splendid orchard and comfortable buildings. He did not owe one dollar to any one; but in an evil hour thought to grow rich through speculation, and yet, he did not call it speculation, nor would many farmer so deem it. He could raise far more corn than he could feed, and the price was low, and if he could only buy cattle enough to eat up his surplus, his profits would be large—more, he thought, than thirty per cent, and surely in such a case 12 per cent interest was not to be considered. He borrowed money and mortgaged his homestead to secure the payment thereof. With the money he purchased cattle to feed, and being a shrewd man he bought with much discrimination. He fed and fattened the cattle, but when ready for market the price had dropped several cents, and his profits were not to be found, in fact he was a loser and, instead of selling his stock and paying all his debt to the minimum, and recovering his lost ground through the strictest economy, he made other ventures. This last winter his farm went to pay the debt, and he has moved away to commence life anew.

An elderly farmer of this county, possessed of a good, well-tilled and well-improved farm, in 1871, thought to grow rich also; and so borrowed about \$900 and mortgaged his homestead to pay for it. Sickness visited his family, and he was unable to attend to the details of the new business in which he had embarked to make money; but had he not plenty of horses, cattle and hogs, and should he worry about a paltry sum of \$900, even if at 12 per cent interest with semi-annual payments! Never! Winter came and one or two horses died. Stock sold low, and he thought to stave off payment of interest until he could obtain better prices. Unfortunately for him, his creditor was easy and accommodating, and no interest was paid, but was allowed to compound. The next year the chinch bug took his wheat and oats, and damaged his corn, the cholera swept away his hogs, and fall found him a much poorer man with little to sell for remitting interest and payment of taxes. To shorten the tale, a few days since he relinquished his farm for his debts, retaining its use and certain privileges through the unwanted generosity of his creditor.

I could take the books of two or three of these examiners of titles that I know, and fill the FARMER for weeks with similar transactions. This is no exaggeration. Men borrow to buy more land than they can use for years, for the sake of building better houses to gratify their own or their families' vanity, or to speculate; and in nine cases out of ten lose their all.

I would say buy only what you can pay for, and what you need; save from your surplus earnings, always struggle to keep a few hundred dollars ahead, even if to do so you go dressed in patched clothes and live on corn bread, with no other coffee than that made from wheat and sugar of your own manufacture.

Let every Grange place beside that other golden rule: "Do to others as you would that others should do to you," this one: "Never go in debt, and suffer some pang of hunger before you mortgage the farm."

You know the old Carthaginian swore his little boy, the youthful Hannibal, to eternal hatred toward Rome, the rival of his beloved Carthage. Let the mothers of Kansas swear their boys, never to go into debt.

That I am not easily carried away by any belief, and that my opportunities for judging have been good, you know Mr. Editor; and while it may seem a wild statement, I believe it is true, that the farmers of this county, Leavenworth, have suffered more from borrowing money and mortgaging their farms to buy land, they did not really need; to build houses they could have waited for one, two or three years, to speculate in cattle or to gratify their own or the household vanity, than they could have suffered from grasshoppers, chinch bugs and drouth combined, had they kept free from debt.

I had intended showing from the experience of a very able and shrewd business man of my acquaintance, the folly to all classes, business men and farmers alike, of going in debt; but my letter is already too long, and I forbear.

Yours, etc.,

OLD FOGY.

Leavenworth Co., May 11, 1875.

THE DAIRY BELLE.—In a recent address the Hon. Harris Lewis said:

"The cow flourishes best where grass flourishes best, to-wit: Between 38 and 50 degrees north latitude. She can live almost anywhere that man can live, but this narrow limit is her most congenial home, and where her most extraordinary profits are produced. I would have but one pasture for the whole season, except where it is necessary to have a night pasture, to prevent too much travel in yarding the cows in the morning. The practice of changing pasture every day or every week, tends to produce a dissatisfied, restless, and uneasy feeling, which unfavorably affects the milk production. I believe in giving a change of food; a variety is necessary, and I would have the variety derived from different grasses, growing in one pasture. I regard it as a great error to sow only one kind of grass in a pasture or meadow, and that one timothy—the poorest of all. The greater the variety the better; and in this variety, prostrate grass, blue grass, red top, and in fact all the long leaved grasses, should have a place.

AN ACRE.—Farmers who think their acres are very large when they are hoeing, and very small when they measure their crops, can test them by the following table:

5 yards wide by 968 yards long, contains one acre.
10 yards wide by 484 yards long, contains one acre.
30 yards wide by 242 yards long, contains one acre.
40 yards wide by 121 yards long, contains one acre.
60 feet wide by 726 feet long, contains one acre.
110 feet wide by 396 feet long, contains one acre.
320 feet wide by 198 feet long, contains one acre.

The following notes we find in the Rural New Yorker:

Turnips and Corn, Together.—The Canada Farmer says.—A Westchester County, N. Y., farmer is in the habit of sowing yellow Aberdeen turnips among his corn at the last passage of the cultivator, when the plants are about feet in height. The turnips do not make much growth until the corn is out, after which they swell rapidly. The cost is nothing except for seed and harvesting, and corn being already out is not injured when the turnips are gathered in. From one to four hundred bushels per acre have been thus obtained without lessening the corn crop. Weeds are not tolerated, and the whole strength of the land is devoted, as it should be, to useful crops.

Tobacco in Algeria.—The cultivation of tobacco in Algeria has been carried out very successfully, the soil and climate of that country being well suited to the growth of the plant. In 1874 no less than 9,700,000 pounds were produced and passed through the state warehouses. The value of this crop was \$141,224, or nearly double that of 1873. The exportment—though it is no longer merely an experiment, but a practical industry—has been carried on since 1847, and during the past 27 years about 140,000,000 pounds weight of tobacco has been produced and sold.

Grasses for Permanent Meadows in England.—A recent English writer recommends a mixture of the following grasses and clovers for meadows, which list may be useful to American readers:—Meadow Fescue, Sweet Vernal, Crested Dogtail, Rough Cockfoot, Hard Fescue, Meadow Fescue, Various leaved Fescue, Sheep's Fescue, Red Fescue, Evergreen Ryegrass, Sutton's Perennial Ryegrass, Pacey's Perennial Ryegrass, Timothy, Smooth-stalked Meadow Grass, Rough-stalked Meadow Grass, Yellow Trefoil, Perennial White Clover, Perennial Red Clover, Alsike Clover.

The hundred societies in this state, not fighting other industries, but studying to elevate the great fundamental interests of Agriculture; the Board of Agriculture with its lectures; the Agricultural College with already a fine class of students; our manufacturing villages to furnish home markets; our railroads for rapid transportation; our towering mountains as the Meccas of health and pleasure to the swarming hordes of our cities; our forests containing oceans of timber and fire; these with the free school, church and press, shall all harmoniously combine with our bracing alpine and robust constitution, the clear heads and strong wills of our citizens to elevate and develop the Agriculture of New Hampshire, and give to it a proper position in public estimation. To produce more and buy less, is a motto gaining adherents. Hayes of Portsmouth is to employ some twenty men this summer upon his farm and to plant some thirty or more acres of corn.—Mirror and Farmer, N. H.

PLAIN TALK.

The farmer sells the products of his labor to the local buyer, and receives, therefore, only the trifling which is left after the commission man and every other man that can thrust himself between him, and ultimate market has been amply paid—many of them extortionately. Should he have enough left to his share to "keep the wolf from his door," and a moiety to lay up against the "years of dearth," he feels himself fortunate, happy, and contented, and the world prates about the independence of the farmer, and stump orators and trading politicians, lead to the spys his "seedy coat," his "sunburnt visage and sinewy arm," and with flattering unanimity christens him and his comrades in toll the "hard-fisted yeomanry of the country." But if at the end of the year, after disposing of his stock and emptying his granaries, he should come out of debt, or with barely enough to defray his immediate expenses and procure the commonest necessities, to say nothing of the conveniences and luxuries of life, in his disappointment and discouragement, he is kindly advised by his more fortunate neighbors of this other great calling, to seek comfort and encouragement in the beautiful doctrine of christian resignation, and to find consolation in the happy reflection that the good Lord has been lavish in the bestowal of his blessings; that the sunshine and dews have been too seasonable, rendering his soil too productive; that he has been too industrious; has labored too hard and has been too frugal, and his harvest has been too bountiful and as a necessary consequence too much produce has been thrown upon the market; the market has been glutted; low prices and insufficient rewards of labor follow, and now as he has been instrumental in bringing about these disastrous results, he should patiently suffer the just penalty of his crime—industry and frugality.—Western Home Journal.

Horticulture.

THE NATURE OF ROOTS.

Every once in a while we read of experiments and observations, showing that "the roots" of plants descend to enormous depths; and although that is the truth, it is one of those truths which are apt to lead cultivators astray, simply because it is not the whole truth. It will aid our readers in the practical details of culture, if we explain to them what roots really are and how they go on, as roots, from year to year.

In the first place, we will take the germinating seed, and note that one portion pushes upward and forms a system of growth above ground,—the other descends to form a system beneath. There is very little difference essentially between these two structures. A root of many years' growth, it finally exposed to the air and light, will become a branch or a trunk, and produce leaves and flowers, just as well in time, as if that had been its original office,—and a buried branch will in time take on the office of roots. Roots and branches are then essentially the same,—simply modified—the one to work for food in the air and light—the other to do the same thing in the dark beneath the ground. We shall be able to judge better of the office and nature of roots if we first cast a glance at the way the ascending axis behaves.

Herbert Spencer in his "Biology," shows that the single cell is the primordial individual, and that a collection of the individuals forming a leaf blade, is the primordial plant. It is the coiling up of this original plate and the lateral union of its faces in consequence, that forms a stem, and all that follows. Our own examinations in plant life accord with Mr. Spencer's. Every part of a plant is modified leaf blade, and it is the attribute of long continued vitality to roll up—to consolidate the separate cells. It requires food to give this enduring vitality,—indeed life is but food transformed. The less vitalized parts die first; they are thrown out in positions where they cannot keep up a draft on nutrition, and death results. Thus a branch is essentially a leaf, as well as the real leaf it bears,—but the consolidation of its cells gives it a greater power of endurance. The leaf exposed on all sides, and the further removed from nutrition, dies—the branch, better situated in this respect, lives. A leaf would live much longer than it does if nutrition treated it better. If we cut off a Gloriosa leaf and plant it, as is generally done to propagate it, it will live long after all the rest on the plant from which it was taken, die. It is more conveniently situated as regards its nutritive sources. The same struggle for life is going on among the branches as among the leaves. In coniferous trees the close relationship we have pointed out between leaves and branches is more closely seen. It is often difficult to tell in these plants what is a leaf and what is a branch. The "needles" of the pine trees are neither leaves nor stems, in the true sense of the term, but phylloid branchlets, in one genus, Sciadopitys, a growth will occasionally occur from the end of the needle which opens at the apex like two seed lobes, to let the new germ grow. But the Arbor-vitae shows this best. In the varieties known as Tom Thumb, Heath leaved, the Melden,

and so forth, the leaves are never combined with the stem and remain weak growing imbeciles. With vigorous powers of nutrition however comes the increased power of combining leaf and branch, and then we have the ordinary form of arborescence growing to good sized trees, and with the leaves and branches so confused together, that it is hard for the student to tell whether some of the young tips are to be called leaves or branches. It is indeed hard for nature herself to tell; for in the fall of the year comes a struggle, as to which of them shall remain to build up the permanent skeleton, and which shall fall as true leaves do. One of the most instructive lessons that a gardener can study is the arborescence in the fall of the year. In August he will see all bright and green. Watching it day by day, he will note in time, some of the branchlets have a yellow tint. By the arrival of winter he will find the majority are yellow and ready to fall, and all of these are those, as he will readily see, the least favorably situated in regard to nutrition. Those which remain to form branches, are in every respect the same as those which have to fall as leaves. It is simply the fate of war that makes one a branch and the other a leaf. In time, however the branches which remain, have varied offices assigned them. Some become leaders, and take charge of the continuous growth of the tree,—others simply use their green surfaces for promoting the general welfare of the tree, forming the main individual tree,—others bear female flowers, and others do nothing but make pollen for the fertilization of the rest.

Now in the system which forms the underground portion of the tree, there is precisely the same struggle for existence, the same division of labor, the same separate office to perform. An immense number stay near the surface, collecting food which they do industriously all through the growing season. They cannot all live any more than all the leaves of a tree can live, and then comes the struggle which shall remain. In fibrous rooted trees not perhaps one in a thousand survives. Those which die, just as in the case of the phylloid branchlets of the arborescence, are those which are the farthest removed from the centres of nutrition. A few are favored and live, and these in time become roots.

But just as in the case of the branches, so these permanent roots take different directions and perform different duties. Some of these dive down deep into the ground, and form what gardeners call tap roots. These rarely send out fibers, but seem to push straight on, and downwards. Another set thicken rapidly, pushing somewhat laterally, but usually descending rather than ascending,—always deep in the ground rather than shallow, but having very few fibrous rootlets. Another set, and a very numerous one, keep near the surface, throwing out myriads of little root feeders in every direction, there is hardly an instance that any one can adduce of a tree having a "root" at many feet below the surface, but what will be found to have hundreds for every such one, not going deep into the ground, but seeking the surface. It is therefore not exactly true that "the roots" run deep, it is only a portion, and that a very small portion of "the" roots which do; and these are as evinced by the almost total absence of fibers, are bent on some other mission than searching for nutritive matters for the tree.—Gardener's Monthly.

SUBSTITUTES FOR FRUIT.

Many families, even that have gardens, fall at times of having a supply of summer fruits for the table, especially in unfavorable seasons such as this is likely to be. It is well, therefore, to consider what can be grown in the vegetable line that may serve in part at least as a substitute.

Rhubarb, or "pie plant," as it is called, comes first in time; but the roots need to be planted a year before cutting for use; or the seed sown two years before; and now is a good time to purchase a half dozen roots or sow a paper of seed. It is a very agreeable and refreshing dish, only requiring too much sugar for those who have rigid notions of economy, although the sugar adds largely to its nutritive value, especially for young persons.

The tomato is the most popular, and whole some of all the fruit substitutes, and in fact may be called both fruit and vegetable. Every garden should have a good supply, especially when the tree fruits are scarce. It is too late now for sowing tomato seed, but the young plant will shortly be for sale at the nurseries and at the stores in town.

Lettuce and cucumbers are used as salads, with vinegar, and are wholesome and refreshing for most persons in warm weather when the system craves acid fruits. They can be had earlier than tomatoes and are on this account desirable.

Melons are not sufficiently appreciated nor rightly used by the majority of families in the country. At the best city hotels and family tables the melons or cantaloupes are used daily, in their season, both at breakfast and dinner, and are found both wholesome and refreshing. Then, watermelons are used freely at dinner as dessert, until the close of the warm season. The prejudice against melons, in the minds of some persons, on account of their supposed unwholesomeness, has arisen from their too free and irregular use by young persons, at night, and not at meal times. Now is the time to plant melons; let the supply be liberal.—M. B. B., in Ohio Farmer.

EDITOR FARMER:—"Clement" asks in FARMER of April 28, for the best remedy for borers in trees. First, use every effort to keep his trees healthy, sound, and clear as possible from sickness, or weak spots from pruning, bruising, or otherwise. No borer eggs are found in the most healthy part of the tree. No serpent is more wise than the female beetle of either the flat or round headed borer. Of my thirty-eight years experience in growing trees and fighting the borers, I have long since settled my anxieties by using soft home made soap as a wash, and if applied May 1st, June 1st and July 1st, of each year, little or no harm will be done by either of the above species. The beetle hatches in the Neosho Valley nearly a month earlier than in the Scioto Valley, Ohio. I found two pairs of the chrysothorax on April 28th (beetles of the flat head) in my orchard; but those in the hatching box in the house, are yet in the larva or pupa state. Every successful horticulturist must use brains and muscle, anything causing smooth, healthy bark, but soap is evidently repulsive to them, hence the practical thing as a preventative, and it is as conducive to health as any application that I have found. The rougher and coarser the bark, the stronger should be the solution. Potash dissolved in water, makes a good bark wash. For the peach borer, egeria, a very different insect from the above; mulching or wrapping the collar with coal tar paper, is the most practical preventative, and soap thinned with fish brine is my preferred wash, to keep smooth peach bark; and to save expense in buying the once celebrated carbolic soap, I use carbolic acid, two gills to the gallon of my wash, except on young tender bark, soap suds or urine is strong enough.

Yours Respectfully,
W. W. TIPTON.

Educational.

EDITED BY PROF. J. B. HOLBROOK.

SCISSORS.

According to very high authority, the word scissors may be represented by the letters of the alphabet in 6,000 different ways, i. e., there are 5,999 ways to spell the word wrong, one way to spell it right. The correct orthography of scissors is deposited in a safe, whose combination lock has 6,000 changes. Any one wishing to take the word from the safe for use, must know the combination upon which the lock was set by a Roman, 2,000 years ago. Almost every word in the language is likewise barred from easy access. They are under combination locks set by learned Romans, barbarous Saxons, ignorant Normans, or slavish Britons and Americans. A 100,000 word is thus stowed away. Every child must learn the combination upon which each word is set, before that word is his for use. One hundred thousand combinations must be learned; not as the combination of figures by the application of a few principles, but separately. And why this system? System! there is no system to it. Why this vast number of locks? Are the words private property? Are they the exclusive right of the few who have ample leisure and pedantic inclination to cram their minds with the unsentimental orthography of our language? Is there danger of losing these words if they are thrown into an open box? Not at all. It is currently accepted by literary persons that spelling is an evidence of culture. This idea translated into plain English, means: If the vulgar masses were not compelled to study orthography five years, they could write almost as well as we. But the great reason for the retention of the present orthography, is, that if it be supplanted by a scientific one, it will be lost. It is true there would be no necessity for losing it. The orthography of "Piers Ploughman," uncouth as it is, may still be seen, and admired or laughed at according to taste. It is true that it would not be lost, that it would be impossible to destroy it. It is also true that its loss would be no detriment whatever to mankind at large. But the fear of losing the present forms of words, the safes with combination locks, is the strong argument put forth by the literary aristocrats. "But no men, more than educated Englishmen and Americans, owe it to themselves, their age, and their mother-tongue, to preserve in its sacred beauty, unbroken and unspotted through all time, the temple of their literature and their language." The temple referred to by Mr. Dwight, is the orthography in present use. Of the "sacred beauty" we shall speak next week.

NOTES ON EDUCATION.

A teacher, who has been engaged for a long time in his profession, and witnessed the influence of a newspaper upon the minds of a family and children, writes as follows: "I have found it to be a universal fact, without exception, that those scholars of both sexes, and of all ages, who have access to newspapers at home, when compared to those who have not, are—
1. Better readers, excellent in pronunciation, and consequently read more understandingly.
2. They are better spellers and define words with ease and accuracy.
3. They obtain practical knowledge of geography in almost half the time it requires of others, as the newspapers have made them acquainted with the location of the important places of nations, their government and doings on the globe.
4. They are better grammarians; for having become so familiar with every variety of styles in the newspapers, from the commonplace advertisement to the finished classical oration of the statesman, they more readily comprehend the meaning of the text, and consequently analyze its construction with accuracy.

MONTHLY REPORT

KANSAS STATE BOARD OF AGRICULTURE.

CONDITION OF CROPS, STOCK, FRUIT PROSPECTS, GRASSHOPPERS, ETC.
Compiled from returns made to the State Board of Agriculture, by officers of County Agricultural Organizations, County Councils of the Patrons of Husbandry, and other correspondents on the 1st day of May, 1875.

ALLEN.

Field Crops.—Less corn has been planted than usual but more millet, Hungarian and flax. Average of winter wheat reduced fully two-fifths below that of former years on account of depredations of chinch bugs last year.
Stock.—No disease. Work animals thin but healthy. Spring pasture is growing nicely.
Orchards, Vineyards and Nurseries.—Peach trees somewhat frozen. Some young apple orchards injured by depredations of grasshoppers last fall. With these exceptions, the prospects for an abundant fruit crop was never better. Of grapes, where the voracious grasshopper trimmed the closest, to per cent. are killed; 5 per cent. of the nursery stock is frozen.
Grasshoppers.—Have hatched in immense quantities and are committing depredations in various localities on spring crops. Oats, flax and garden vegetables suffer the most.

ANDERSON.

Field Crops.—All the crops look well except the late sown winter wheat. There was a decrease in acreage of winter wheat of over 4,000 acres sown last fall. More than the usual breadth of corn planted. Soil in good condition. Spring work well advanced.
Stock.—No disease reported.
Orchards, Vineyards and Nurseries.—Peach trees somewhat injured by drouth last summer, and subsequent freezing. The south side of many apple and peach trees injured. Borers working in the injured places. Fully 20 per cent. of grape vines killed. Pears, cherries and small fruits promising well.
Grasshoppers.—"Millions have hatched" and are doing considerable damage in localities. Eggs deposited in spots—in protected exposures, near belts of timber skirting the streams, and on unplowed ground. Flax, oats and vegetables destroyed near the hatching grounds, elsewhere exempt. Damage confined mostly to creek bottoms, and fields in immediate vicinity. Jackson township, west of Garnett, has suffered the most. Here entire fields of oats and flax have been consumed. Corn taken as fast as it comes up.

ATCHISON.

Field Crops.—All looking remarkably well. Soil in admirable condition. Usual acreage planted with an increase of corn, flax and winter wheat.
Stock.—Health, good. Thin in flesh but thriving on spring pasture. Work animals have suffered for want of grain, but as a large amount of ground was plowed last fall, farmers will be able to do the spring work without much inconvenience on that account.
Orchards, etc.—Fruit trees were injured last fall by drouth and grasshoppers. Peach trees badly frozen during the winter. Young trees injured but will survive. Grape vines damaged by hard freezing.
Grasshoppers.—From the center to the western part of the county, they have hatched only in spots. In the eastern part they are more general, especially near the timber. No very serious damage is apprehended.

BROWN.

Field Crops.—Winter wheat killed badly by hard freezing and dry winds. What remains looks well. Spring wheat not quite up to average. All other crops look finely.
Stock.—No prevailing disease.
Orchards, etc.—An abundant harvest of fruit in prospect. Peach trees and grape vines injured by freezing, but not enough to interfere with prospects for an ordinary crop.
Grasshoppers.—Myriads are hatching and are skimming around the edges of fields of spring wheat, oats, flax and gardens. Not much damage as yet.

BUTLER.

Field Crops.—Crops looking finely and farmers very hopeful. Acreage of winter wheat more than three times as great than at any previous year.
Stock.—No disease. Work animals very thin for want of grain, but all other stock is recuperating from the effects of a severe winter and the scarcity of food, since turned out to pasture.
Orchards, etc.—Fruit trees and vineyards wintered very well, but the borers are damaging the apple.
Grasshoppers.—Have hatched in some localities, but no damage is apprehended. Chinch bugs more to be feared than the grasshopper. Millions of the former are making their appearance.

CHASE.

Field Crops.—Crops looking remarkably well. Usual breadth planted of the various crops except potatoes. Decrease owing to scarcity of seed.
Stock.—No disease; thriving since grass made its appearance.
Orchards, etc.—Apple trees nearly all safe. Peach trees doing well that were protected from grasshoppers last fall, but injured where they were stripped of their foliage.
Grasshoppers.—Have not hatched in sufficient quantities to do any injury.

CLAY.

Field Crops.—Nearly all crops are looking well. Oats not quite as forward as last year at this time. A large increase in acreage of winter wheat and corn.
Stock.—Very weak for want of grain, but no disease prevailing. Percentage of loss no greater than usual. It is extremely difficult to do farm work on account of the condition of work animals.
Orchards, etc.—Nearly all of last year's growth of wood destroyed by grasshoppers last fall, in consequence of which about three-fourths of the young trees are dead.
Grasshoppers.—Are hatching in considerable numbers in the creek bottoms. Nothing harmed as yet except early vegetables.

CLOUD.

Field Crops.—Acreage of winter wheat more than double that of last year, and prospect for an abundant harvest never better; oats being the only exception, being about 25 per cent. below par.
Stock.—Cattle, horses and swine, thin and weak for want of grain. Sheep afflicted with foot rot and drouth.
Orchards, etc.—Nearly all dead. Grasshoppers seemed to have poisoned the buds, and the effort of the trees to bud late last fall, and the consequent heavy flow of sap which was caught by the early frost, seems to have killed most of the orchards.
Grasshoppers.—Some have hatched along the streams and in the creek bottoms, but no damage is apprehended.

COWLEY.

Field Crops.—Late sown winter wheat killed out some. Early sown, and other crops, are looking well. Large acreage of corn planted. Rain is needed.
Stock.—Healthy, but work animals are weak, and farm work has been retarded somewhat in consequence.
Orchards.—Apple trees one half destroyed by borers. Peach trees injured slightly by cold of past winter. Fruit trees were stripped of foliage in the fall by grasshoppers, which had much to do with the injury sustained.
Grasshoppers.—Not any. No eggs deposited.

CRAWFORD.

Field Crops.—Crops in splendid condition. Never better.
Stock.—No disease; condition good. Work animals a little thin, but in good heart.
Orchards.—Apple and other trees have been injured by the borer to a considerable extent. Vineyards in good condition. Fruit prospects excellent.
Grasshoppers.—Have hatched to an alarming extent, destroying wheat, oats and vegetables. Don't seem to be as numerous as some days ago.

DICKINSON.

Field Crops.—Never better. The waving fields of winter wheat present a beautiful appearance. Fields of from 500 to 1,000 acres are not uncommon. Dickinson, this year, will claim the palm as the banner wheat county of the State. No ground idle for want of seed or fear.
Stock.—Healthy and happy.
Orchards.—Peach trees over three years old are nearly all killed. Orchards, vineyards, and nurseries, injured by drouth and grasshoppers last fall, caused a new growth after fall rains, and then cold weather killed the current year's growth, and sometimes the entire tree or vine to the ground. Hedges planted in spring of 1874, badly injured.
Grasshoppers.—Some have hatched, but are doing no damage worthy of note.

DONIPHAN.

Field Crops.—Late sown winter wheat was badly injured by hard freezing and dry winds of March. Early sown wheat put in with a drill as a general thing looks well. Timothy and clover injured by the foraging of the grasshoppers last fall, followed by a hard winter.
Stock.—In the eastern part of the county, horses and mules are afflicted with distemper, and a few have died. Otherwise, stock is in good health and condition.
Orchards, etc.—Peaches badly injured by both grasshoppers, last fall, and hard freezing. Young apple trees where they are stripped of foliage are sun scalded on the south side. Borers penetrated the injured spots and have done considerable damage.
Grasshoppers.—Are hatching, but no serious trouble is anticipated. They are confined to spots and will there do some damage, but it is not believed that the injury to crops will be general.
Another correspondent writes: "There are myriads of grasshoppers and they are destroying vegetables and small grain."

DOUGLAS.

Field Crops.—Spring crops green and thrifty. In the absence of chinch bugs and grasshoppers the prospects are cheering for an early and abundant harvest.
Stock.—Suffering for want of grain, otherwise healthy.
Orchards, etc.—Peach trees seriously injured by cold weather. Pear trees supposed to be healthy two months ago are found to be dead from effects of blight. Those living are blossoming well. As a whole there will be an abundance of fruit. Nurseries are in good condition.
Grasshoppers.—Are hatching by millions, and going for vegetables and oats with a relish.

FRANKLIN.

Field Crops.—A large decrease of acreage in winter wheat; an increase in corn and flax. About the usual amount of seed put in, and crops are looking well.
Stock.—Thin but healthy.
Orchards.—Peach trees slightly injured; also grapes.
Grasshoppers.—Eggs have hatched extensively and in some places the ground is entirely covered with young grasshoppers. Injury thus far is confined to localities where they have hatched.

HARVEY.

Field Crops.—Field and other crops looking unusually well. Have had plenty of rains. Winter wheat is almost made, and much that was considered dead is springing up nicely.
Stock.—Looking unusually fine except work animals. Cattle and horses were wintered on prairie grass and hay.
Orchards, etc.—Fruit trees are injured somewhat by being twice stripped of foliage by grasshoppers last fall. Borers have done some damage.
Grasshoppers.—Not any except a few natives.

HOWARD.

Field Crops.—Small grains looking well and spring pasture abundant. Chinch bugs numerous in some localities.
Stock.—No disease reported except a little blackleg in calves. All stock in pasture is doing exceedingly well.
Orchards, etc.—Orchards and nurseries are in good condition. Grape vines badly frozen.
Grasshoppers.—A very few in isolated localities.

JACKSON.

Field Crops.—About the usual acreage. A small increase in winter wheat and corn, and a decrease in potatoes, all, together with spring pasture, looking finely.
Stock.—No disease.
Orchards.—Badly injured; bearing peach trees killed. Grape vines and current bushes, in many places, are killed, caused by grasshoppers stripping them of leaves, thereby exposing them to the direct rays of a burning sun followed by a severe winter.
Grasshoppers.—Numerous in places. Have foraged on wheat, oats, and garden vegetables to some extent.

JEFFERSON.

Field Crops.—Present prospects very flattering.
Stock.—Healthy.
Orchards, etc.—Combination of circumstances—hot sun and dry winds of last summer, grasshoppers of autumn, and freezing of winter, caused great injury. Notwithstanding this, however, there will be a fair fruit crop. Orchards with south-westerly exposures suffered the most.
Grasshoppers.—Have hatched plentifully.

JOHNSON.

Field Crops.—Quite an increase in acreage of winter wheat, but this increase is more than lost by winter killing. Flax extensively sown, is up and looking well. Clover badly winter killed; also, some timothy meadows and pastures were, in many instances, eaten into the ground, leaving no protection whatever against hard freezing and the raking, dry winds of winter.
Stock.—Poverty is the only trouble. Loss during the winter smaller than usual.
Orchards, etc.—Peaches and Osage hedges partially killed back by freezing. Apples and small fruits promise good crops. Another correspondent says: "Orchards were injured last summer by grasshoppers removing the fruit buds, last winter by severe frosts, and this spring by flat-headed borers."
Grasshoppers.—Our correspondent reports grasshoppers not as numerous as in 1867, but they are foraging on gardens, timothy and clover meadows to some extent.

LABETIE.

Field Crops.—Prospects for an abundant crops never more flattering. Fully 25 per cent. increase in winter wheat acreage. Early sown, heavy and in splendid condition; late sown, rather light.
Stock.—No disease reported. Cholera among poultry.
Orchards, etc.—Are in good condition. Have come through the winter all right. Borers have injured young trees to a limited extent. Fruit prospects good.
Grasshoppers.—Have hatched in immense numbers, and are doing slight damage to early crops. Farmers are of the opinion that they are not increasing in numbers and that they will emigrate as soon as they can fly. Are the most numerous in bottoms along timber belts.

LEAVENWORTH.

Field Crops.—Prospects for an average crop, good. Winter wheat in excellent condition, except that which was sown late. Not much spring wheat sown, and as usual is not looking as well as winter wheat.
Stock.—No disease prevailing.
Orchards, etc.—Peaches injured by freezing. A fair crop of grapes and small fruits. Apples promise an average crop. There will be some peaches.
Grasshoppers.—Are hatching by the millions, but are confined to localities; are not general; have done but little damage as yet, and the farmers who were here in 1867, are not very nervous about the result.

LINN.

Field Crops.—About the usual acreage has been planted. Late sown wheat froze out considerably.
Stock.—No disease reported. Owing to the want of proper food and protection cattle have become weak and debilitated. Several head are reported as having died from the effect of eating buckeyes.
Orchards, etc.—Many young orchards which were planted last spring were damaged by hot, dry winds. The trees were scalded on the south side and borers attacked the places thus afflicted. Apple blossoms scarce. Pears, cherries and small fruits make a good showing.
Grasshoppers.—Have hatched in immense numbers. Have taken garden vegetable and commenced on oats and flax in some localities. Individuals have been damaged, but as a county, damage as yet comparatively slight.

LYON.

Field Crops.—Crops looking well. The season, thus far, has been very favorable for farm operations, and farmers are encouraged with flattering prospects of good crops again.
Stock.—Cattle in excellent condition. Work animals thin, but no prevailing disease. Swine very thin on account of want of grain during the winter.
Orchards, etc.—Young orchards injured by sun scald and borers. Peach trees killed back slightly by freezing. Fruit prospects will average with other years.
Grasshoppers.—Plenty of them but no great damage has been sustained as yet.

MIAMI.

Field Crops.—"Our wheat crop is a total failure. Not one acre in one hundred sown will be harvested. The hard freezing of last winter the cause. There has been at least twice the acreage of corn planted this spring, over any year, and about the same proportion of oats.
Stock.—Stock of all kind looks well considering the long winter and scarcity of feed.
Orchards.—Nurseries have been damaged by rabbits more than at any previous year. Vineyards in good condition. Orchards irreparably injured by borers. The bark cracks open on the south-west side of the tree, probably from effects of sun and wind where the borers enter. Will be no apples here on account of grasshoppers eating the fruit buds last fall.
Grasshoppers.—More than a hundred million billion are now quartered upon us. They promise to do us great damage. They hatch in certain localities and eat up everything around or near the place where they hatch. We hope they will soon be able to leave and will not stand on the order of their going."

MARION.

Field Crops.—"Crops looking finely." Some early planted corn suffered on account of continual damp, cold weather. Many fields replanted.
Stock.—No disease.
Orchards, etc.—Apple trees in fair condition. Some injured from effects of grasshoppers last fall, and borers made their appearance this spring. Peaches, pears and grapes suffered most.
Grasshoppers.—Our correspondent notes: "So far as I can learn there have been very few, if any, eggs hatched."

MITCHELL.

Field Crops.—Breadth of wheat, rye, oats and corn greater than at any previous year. Rains frequent and plentiful; ground has been in good condition and farmers elated with the outlook.
Stock.—No diseases. Cattle, horses and mules thin, but picking up nicely on new grass. Work animals are exceedingly weak, and were it not for the circumstances that farmers plowed a large breadth last fall in anticipation of this spring work would have been delayed.
Orchards, etc.—Nearly ruined. Defoliated in July by grasshoppers. Hot sun and dry winds which followed generally killed them. Large peach trees and young artificial forest, served in the same way. Young grape vines badly injured by freezing.
Grasshoppers.—No eggs were deposited.

MONTGOMERY.

Field Crops.—Wheat looking remarkably well. Some is now, May first, knee high. There are very few poor fields, and they are confined to late broad-cast sowing. Where put in early and with a drill it is uniformly good. Recent rains which fell on March 30 and April 7 and 10, aggregating 4.39-100 inches, have given spring pastures and meadows a good start. The country is looking beautiful and farmers are hopeful.
Stock.—No disease prevailing, but work animals are thin.
Orchards, etc.—Fruit trees have emerged from winter all right, but borers are at work. Fruit prospects very good.
Grasshoppers.—Are very numerous in some localities along the timber belts and water courses. No serious damage yet, except to garden vegetables and the edges of oat fields.

NEMAH.

Field Crops.—A large increase in acreage of winter and spring wheat, corn and flax. All looks well.
Stock.—Stock in good, healthy condition. Farmers have learned that good prairie hay with extra care is better than prairie hay and corn without the care.
Orchards, etc.—Grasshopper depredations injured fruit trees somewhat, and then the severe winter which followed damaged fruit trees—especially the peach—as it would not have done had it not been for the first injury. A fair crop is looked for. A small per cent. of grape vines frozen.
Grasshoppers.—Plenty of them in certain localities, not general through the county. Confined to bluff localities where south and south-western exposures were found for depositing eggs. Many farmers are nervous, but those who were here in 1867 pay but little attention to them.

NEOSHO.

Field Crops.—About the same acreage as in '74. The outlook is cheering, except the menaces of grasshoppers and chinch bugs.
Stock.—No disease reported. Spring grasses have already given stock a fine start. Work animals have a hard time of it.
Orchards, etc.—Peach trees killed to some extent by frost. An ordinary fruit crop is promised from present indications.
Grasshoppers.—Are reported to be hatching near the timber.

OSBORNE.

Field Crops.—Average of winter wheat greater than at any previous year. Most of last year's crop of winter wheat on hand at seed time was used for seed. Spring wheat was sown quite extensively for the reason that it took less team work to prepare the ground for corn. The usual average of other crops have been sown.
Stock.—Hay and feed are not worth speaking of in the county, making the average condition of work animals low.
Orchards, etc.—Fruit trees nearly all dead. All dead above the ground. Causes: Grasshoppers ate off the leaves and bark in July last. Then the long continued drouth with dry winds, frequent rains in September, and an extremely cold winter finished the job.
Grasshoppers.—No eggs deposited.

OTTAWA.

Field Crops.—Never looked better. The wheat crop is of greater breadth than last year, and is very promising. Seed potatoes could not be had in quantities to meet the wants for seed. The usual acreage of corn has been, or will be, planted. Pasture good.
Stock.—Healthy. Work animals thin. A large breadth was plowed last fall, which enables farmers to go through with farm work without feeding much grain.
Orchards, etc.—Orchards young and damaged by first being stripped of foliage and then scalded by the sun on the south side. Borers are at work and doing much damage.
Grasshoppers.—Not any worthy of mention.

POTTAWATOMIE.

Field Crops.—Farmers all ahead with their spring work, ten or twelve days earlier than last year. Seed corn scarce and of poor quality. Wheat put in early with drills looks well. Most crops in good condition.
Stock.—"Our work teams are in a very poor condition in consequence of the scarcity of grain, very few having but little to feed. There are but few hogs in the county and they are in poor condition. Neat cattle have come through better than usual on account of the dryness of the winter."
Orchards, etc.—One of our correspondents reports: "After the grasshoppers left last fall, fruit and shade trees put out new buds and leaves, and many fruit trees were full of blossoms. When cold weather set in, the second growth was very tender, and was killed. Orchards set out last spring were almost an entire failure. Osage hedges set out in the spring of 1874, are killed. Grasshoppers ate the bark off at the ground in most cases. Grape vines badly injured. I would recommend young orchards to be planted with corn for a few years to protect the young trees from the heat of summer. Cut up the corn and stock it in the orchard. Let it stand all winter and you will not be troubled with rabbits girdling your trees. Gardens are early this year."
Grasshoppers.—"Grasshoppers are not hurting field grains much; are eating garden vegetables to some extent. The black birds, long-billed snipe, prairie chicken and quail, are destroying them and the chinch bug, and should be protected by law for the next five years, at least, and not be allowed to be destroyed at any season of the year. They will be the salvation of the small grain crop, if we have any."

May 26, 1874.

MEMO.

Field Crops. "Reno county is but three years old, all are beginners again this year, everything having been destroyed last year. Much difficulty is experienced in getting seeds. Some will have to go without. Pasture is fine. But few of the farmers are feeding grain, they work half the time and graze their teams. About 25 per cent. of the corn is planted. All will be planted within ten days if seed can be had. The season has been unprecedently cold and backward. Abundant rains now and crops growing finely."

Another correspondent says:
"Private advices report crops generally in good condition, but stock of all kinds, poor."
Stock. No disease reported, and stock running out is thriving. Work animals very thin on account of the scarcity of grain during the winter.

Orchards, etc. The fruit trees were injured by grasshoppers last summer. Otherwise they are doing well. No nurseries in county with stock more than one year old. No vineyards or orchards in bearing. Nearly everything in the line of fruit trees killed or badly injured by grasshoppers.

REPUBLIC.

Field Crops. Winter wheat looks well. Prospects fair for good crops.
Stock. "Healthy, no prevailing disease, but low in flesh."

Our correspondent adds:
"The poor condition of animals is owing to the scarcity of grain, and the poor quality of hay which was badly damaged by the heavy rains of last fall and a lack of proper shelter from the severe storms of last winter."

Orchards, etc. Condition of Orchards good. Vineyards damaged by hard freezing. Nurseries slightly injured.
Grasshoppers. None.

RICE.

Field Crops. Crops looking well, especially wheat and flax.
Stock. No disease prevailing; stock all got through the winter in good condition and are now doing well on the new grass.

Orchards, etc. But few fruit trees in this new county; nearly all killed by the grasshoppers last summer.
Grasshoppers. A few are reported in two or three localities, but are supposed to be natives.

RILEY.

Field Crops. Farmers are in good spirits. More forward with their crops than on previous years. Corn is nearly all planted and the ground in good condition. Late sown winter wheat injured. Early, uniformly good.

Stock. Cattle are beginning to pick up since the grass has made its appearance. Work animals thin and weak for want of grain.
Orchards, etc. Many young orchards and vineyards badly injured. They did not recuperate from the ravages of the grasshoppers.

Grasshoppers. Many have hatched in spots, but no damage has been done as yet.

ROOKS.

Field Crops. No report of field crops.
Stock. Stock healthy.
Orchards. Nearly all the trees that were planted last year were killed during the fall and winter.

Grasshoppers. None. No eggs were deposited.

RUSSELL.

Field Crops. "There are six times as many acres of wheat this year as heretofore. So with rye and barley. Our prospect at this time is quite good for a crop. Plenty of rain but rather cold. We have every kind of grain and vegetables started much earlier than heretofore. Our acreage is limited only to the quantity of seed. More land would have been cultivated if seed could have been obtained."

Stock. No disease of any kind except cholera among poultry.
Grasshoppers. A very few have made their appearance, but have disappeared, probably destroyed by storms. (Were probably natives. Sec.)

SALINA.

Field Crops. Winter wheat acreage at least a third larger than that of last year. All crops are looking remarkably well. The agricultural outlook is decidedly encouraging.

Stock. Poultry afflicted with cholera in many localities. During the winter, large numbers of swine starved. What are left are very thin in flesh. No other trouble. Cattle are living on the range, but pasture is meager yet.

Orchards, etc. Fruit trees injured by depredations of grasshoppers last fall, and severe freezing during the winter.
Grasshoppers. Young grasshoppers have made their appearance in some localities, but do not seem to be doing much damage.

SEDGWICK.

Field Crops. Of wheat and rye more than double the acreage of 1874. A large area of corn, flax and oats planted. All looking well.

Stock. No disease.
Orchards. "In bad condition, caused by grasshoppers eating the leaves last summer, and the trees budding in the fall. Vineyards are in fair condition." Another correspondent writes: "Bad condition budding in the fall. Vineyards are in fair condition. Wood of apple, peach and pear, in many cases killed at top, but caused by drought and grasshoppers. Wood of apple, peach and pear, in many cases killed at top, but caused by drought and grasshoppers. This is, I think, the condition of 50 per cent of trees, and especially is true of those set last season, and if the per cent was based upon last year's planting alone, I would raise the per cent. to 80."

Grasshoppers. No eggs were deposited in this county.

SHAWNEE.

Field Crops. Early sown winter wheat looking well. Late sown, especially that which was sown broadcast, winter killed badly. The usual breadth of other crops has been sown.

Stock. No disease. Animals, especially work animals, are thin in flesh for want of grain.
Orchards, etc. Peach trees very badly injured by freezing after they had received a trimming by grasshoppers. It is not certain but that the grasshopper devastation alone would have killed them. Boreas are working in apple trees. In nearly every case, it is when the tree has sustained some injury first, by which its vitality is impaired.

Grasshoppers. Have hatched in large numbers in localities. Eggs were mostly deposited where the ground was not disturbed by plowing last fall. Have not done much damage.

SUMNER.

Field Crops. A very large increase in acreage of winter wheat was sown and is unusually promising. Of other crops the breadth is fully as large as in 1874, and the prospect is very encouraging.

Stock. No prevailing disease. Work animals and swine very thin. Cattle doing well on the range.
Orchards. Orchards that have been properly cared for are in good condition. Nursery stock doing well.

Grasshoppers. No eggs deposited.

SMITH.

Field Crops. Some barley was sown in this county last fall, but it proved to be a spring variety, and consequently failed. No spring wheat was sown owing to the fact that the general impression among the farmers is that it induces more chinch bugs than winter wheat.

Stock. No prevailing disease. Some work animals have died for want of proper food. Farmers who plowed their land in the fall have got in their crops in good season.

Orchards, etc. Young trees and osage orange injured by grasshoppers and cold. Trees all young. No old orchard in the county.

Grasshoppers. A few are said to have made their appearance. (Must have been natives, unless there was a second visitation in the fall. Sec.)

WABAUENSEE.

Field Crops. Early sown winter wheat in good condition, late sown frozen out badly. Rye, oats, barley and flax in good condition. Corn and vegetables all backward.

Stock. No prevailing disease. A few head of cattle have been killed by eating buckeyes. Work animals quite thin and weak, yet they have endured spring work remarkably well.

Orchards, etc. Boreas making bad work with young apple trees which were injured by grasshoppers and dry winds last fall. Peach trees nearly all killed, except in protected localities. Still we have a blossoming promise of some fruit—a light crop. Small fruits in good condition.

Grasshoppers. Have hatched in large numbers in localities where egg depositing was possible. No damage done yet.

WILSON.

Field Crops. About the same acreage of field crops has been planted as last year and are looking well.

Stock. No disease among stock. Work animals are a little thin, from want of proper food.
Orchards, etc. Orchard are in good condition. In a few instances the bark has been sun burned and is scaling off. Vineyards and nurseries are in good condition.

Grasshoppers. Have hatched out by the million. They appear in largest numbers along the streams, especially at the junction of the Verdigris and Fall rivers. Late planted wheat has been attacked by them, but the wheat of older growth has not been damaged. Garden vegetables have suffered. They appear in localities and are not general over the county. They cannot prove of material injury.

WOODSON.

Field Crops. About half the acreage of wheat and rye for last year, was planted. A perceptible falling off in the acreage of oats. An immense acreage of corn has been planted.

Stock. No disease reported, but work animals are doing poorly, for lack of proper diet. Sheep are in flourishing condition. Swine not doing so well.

Orchards, etc. Orchards in good condition. One year old hedge plants were injured by the excessive drought last summer, and by the grasshoppers eating the leaves. Many were winter killed. All other nursery stock doing well.

Grasshoppers. Hatched in countless numbers. No mention is made of any material damage having been done as yet.

WYANDOTTE.

Field Crops. Some of the winter wheat is being plowed up. The ground will be used for corn. A slight increase in the acreage of oats, but corn will be the main crop. Every available acre will be planted.

Stock. Hogs generally are in fine condition, yet many are dying from a disease similar to cholera.
Work animals are in good condition.

Grasshoppers. Eggs were laid in moist, shaded fields last fall, and now are hatching in great numbers. Are skimming around oat fields, and intruding upon gardens.

Orchards, etc. Apple trees are somewhat injured by boreas. The wood of healthy trees was so well ripened that the severe winter did not harm. Peach trees were somewhat injured by freezing. The winter was hard on vineyards, but it is too early to tell the exact condition. (Later advices indicate orchards and vineyards in usual good condition. Sec.)

THE STATE—GRASSHOPPERS.

The foregoing crop reports make a good showing for the State, as a whole. Farmers are a little nervous in consequence of the severe trials of the past year, and of apprehensions of danger from the grasshoppers the present season. This unsettled feeling has brought out prominently the causes of failures of the past year, with all the bad results incident thereto. But with the condition of all our principal crops, above an average as compared with other years—years of plenty and prosperity—we have reason to be hopeful over the cheering prospect of an abundant harvest.

We are in receipt of the "Seventh Annual Report of the Noxious, Beneficial and other Insects, of the State of Missouri," by Prof. C. V. Riley, State Entomologist. The Report is a work of great practical value. From an article on "The Rocky Mountain Locust," we gather items of interest, bearing upon the grasshopper problem.

From a chronological record of locust invasions, we quote the following:
"In 1818 and 1819, according to Neill's History of Minnesota, vast hordes of grasshoppers appeared in Minnesota, eating everything in their course, in some cases the ground being cov-

ered three and four inches thick. In some years they were extremely injurious in the Red River country in Manitoba. In 1830, or the succeeding year, we hear of them falling upon the western counties of Missouri, as described in the following items:

"We were informed by old residents of West Missouri, and some of the Indians, that long ago, I think it was in 1830, there was just such a visitation of grasshoppers as is now afflicting us. They came in the autumn by millions, devouring every green thing, but too late to do much harm. They literally killed the earth with their eggs, and then died. The next spring they hatched out, but did little harm, and when full-fledged left for eggs, and then died. Other districts of country have been visited by them, but as far as I could learn, they have done but little harm after the first year.—S. T. Kelsey, Ottawa, (now of Hutchinson,) Kansas, in *Private Farmer*, June 15, 1867, p. 286.

"A Missouri paper publishes a statement by an old settler, that great numbers of grasshoppers appeared in September, 1830, doing much damage. The next spring they hatched out, *destroying the cotton, flax, hemp, wheat and tobacco crops*; but the corn escaped uninjured. About the middle of June they all disappeared, flying in a south-east direction.—*Western Journal*."

It is reasonable to suppose that the 1830 swarms also ravaged Kansas, and the country to the northwest, very much as they did in 1874, though no records of the fact are to be found, for the simple reason that the western country was unsettled by farmers."

The following letters are reliable and seem to show that the invasions have been in spots and strips of country:

Maywood, Wyandotte County, Kan., May 13, 1875.—*Sec'y State Board of Agriculture*:
DEAR SIR: I am in receipt of yours of the 11th inst., asking "information concerning the visitation of grasshoppers in Kansas." In reply allow me to say, their history, so far as Kansas is concerned, is very soon written. Until 1867 the oldest inhabitants had not heard of them.

As you know, I came to what is now the State of Kansas, in 1837, and it has been my home since that date. The Indians were accustomed to hunt at random the entire plains East of the Rocky Mountains—if they ever encountered grasshoppers I am certain I should have heard them speak of the occurrence. From them, or any other source, I never heard of the existence of our present invaders. 1867 is their first appearance. As they do not belong in our climate I do not apprehend we shall soon, if ever, be scourged with their presence again.

If our citizens, recently located, would consider that since 1837 there has been but two dry seasons, 1860 and 1874, and that grasshoppers were not heard of in the memory of man until 1867, they would not be greatly alarmed at the re-occurrence of such evils in Kansas, one of the best States of the many.

Respectfully Yours,

JOHN G. PRATT.

Osage Mission, Neosho County, Kan., May 13, 1875.—*Sec'y State B'd of Agriculture*:
SIR: Within find some items from the memorandum book of Rev. P. M. Poniglione.

The young locusts are destroying from the middle of April to the present date all the crops within the limits of four miles from the Neosho bottoms of this vicinity, and they are in considerable numbers near all well timbered creeks; up to now only few are found on the high prairies. Many of the wheat crops in Montgomery and Howard Counties look promising, likewise near the Big Caney, Indian Territory.

Respectfully,

JOHN SCHOENMAKERS.

Osage Mission, Neosho County, Kan., May 13, 1875.

"This Mission was established in 1847. The first time we saw the grasshoppers here was in the fall of 1854, after a very dry summer, during which hardly any crop was raised. The grasshoppers came down over this county like a fall of snow, destroyed all that was to be found in the garden, and even ate the bark off several peach trees. They deposited a very large amount of eggs in the ground and went off in October. The winter following was a very severe one. As soon as spring did appear the eggs were hatched out, and myriads of little grasshoppers began to swarm all over the country. They ate all the oats, and cut down all the corn; this we planted three times and we did not gather but a little fodder after all. Moreover they also destroyed all the grass on the prairies, and the season having again been very dry, we could not even make hay, and were bound to send some of our horses in Henry County, Missouri, to be taken care of during the winter between 1855 and 1856.

The country was again visited by grasshoppers in the fall of 1866. On the 12th day of September they descended like a shower over our fields and gardens, and in a few days destroyed all the vegetation. Their number was again very large. This time they came after a good season, and fortunately most all the crops were saved. In the following spring, 1867, we had a very early spell of warm weather, which lasted several days and caused the grasshoppers' eggs to hatch out. They were just swarming over the ground, an army of microscopic insects, when a sudden freshet having come they were all swept away and that year we gathered very good crops. But some 100 miles North of this Mission it was not so; for the grasshoppers' eggs having hatched later, nothing could check the growth of the insects, nor hinder them from destroying the crops."

There will be individual loss this as in previous years, in consequence of the ravages of the grasshopper, but it is not believed that the State, as a whole, is going to meet with any serious disaster.

Last year the damage was from N. W. to S. E., being the lightest in the eastern parts of the State, where the visitation was too late for them to materially injure the crops; and the heaviest—the western portion, where they were just in time to take the principal crop—corn, when it was young and tender. The reverse is true this year. The invasion was too early in '74 in the west for eggs enough to be deposited to do any serious harm this season, but the pests, when delayed in their march so that about the longitude of Topeka they commenced depositing eggs to such an extent as to give farmers some little uneasiness, and continued to deposit more as they approached the eastern line of the State and the Western Counties of Missouri later in the season.

TREE CULTURE.

In the Third Annual Report, the State Board of Agriculture recommended the following list of trees for planting in Kansas:

Forest. Black walnut, cottonwood, silver maple, osage orange, ash and red cedar.
Ornamental. Ash, elm, catalpa, box elder, osage orange, sycamore, golden and white willows.
Evergreens. Red cedar, Austrians, Scotch and white pines.

Hedges. Osage orange.
The terrible ordeal to which both deciduous and evergreen trees have been subjected during the past fall and winter—drought, grasshoppers and freezing—a combination of the most severe tests—has given the Board no new data for the revision of the foregoing list, except that the pines and silver maples suffered in many localities. The former were defoliated and killed by the grasshoppers in some cases; in others by the hot dry winds of summer. Maples were sun scalded on the south-west side, and are now found to be filled with borers in and below the injured places. While the fall of 1874, and the winter of 1874-5, were exceptional, those interested in tree culture in the State, may profit by the experience of the past year. The wood of the silver maple is brittle, breaks and splits badly in our prairie winds, and is liable to be injured with the green maple worm, which renders it very objectionable as an ornamental tree.

A GROSS IMPOSITION.

Of all the rascally impositions ever perpetrated by the most depraved deceivers, that of selling dead or damaged trees is the meanest. Loss of time and grievous disappointment growing out of the practice, cannot be measured in dollars and cents; the damage is irreparable. And yet, those who ought to be able to appreciate this better than any one else—nurserymen and dealers—have been guilty of this crime. Trees have been shipped and sold to citizens of Topeka and vicinity (and the same nurserymen have been operating elsewhere) which had been handled with such criminal negligence that they either die at once or linger along a few years, making a very unsatisfactory and sickly growth, and then die. Trees have been shipped in open flat cars, without boxing or packing, by nurserymen, with fibrous roots exposed to a withering sun and the drying winds. Dealers have received and sold them with a full knowledge of the facts, after having them "healed in" long enough to give the dead roots a fresh appearance. In some cases nurserymen have shipped trees of this kind to their own agents who have sold them to those wishing to plant. The failures incident to this imposition are attributed to soil and climatic influences, and may be found among the indictments against the State. The positive evidence of these frauds did not come to the knowledge of this Board until the planting was about over for this season, or else a thorough exposure would have been made. It will be looked after another year.

Patrons of Husbandry.

CERTAIN NEEDED REFORMS AND CHANGES IN THE GRANGE ORGANIZATION.

I. The abolition of all degrees beyond the Fourth.

II. The making of all Fourth degree members eligible to any position in the Grange, from Gate-keeper to Master of the National Grange.

III. The removal of the National Grange Headquarters to St. Louis.

IV. The abolition of fifth degree Granges and substituting therefor the Business Council.

V. The reduction of the dispensation fee to one dollar, and reduction of dues to the simple cost of salaries and office expenses for National and State Grange Headquarters.

VI. The return of all accumulated funds in National Grange Treasury to subordinate Granges.

VII. The thorough organization of the business features of the Grange, by States and counties, as an absolute necessity for the perpetuity of the Order.

VIII. The County Council to constitute the business unit and the concentration of all surplus funds in the hands of the Council, where under the immediate supervision of those who contribute it, it may be applied to practical business enterprises.

The above is the Grange platform of the KANSAS FARMER. Upon the important question involved, we invite free and independent discussion. We distinctly require of correspondents, that they treat, in their communications, with courtesy and consideration, those from whom they may differ in opinion.—*EDITOR FARMER*.

\$1. \$1. \$1. \$1. \$1. \$1.

Pays for the FARMER for the balance of 1875.

A WORD OF EXPLANATION CONCERNING THE KANSAS FARMER GRANGE PLATFORM.

A correspondent writes to say that while endorsing the ideas contained in the KANSAS FARMER Grange Platform, he fears that it may in part be misunderstood. He asks: "Do you want the KANSAS FARMER Grange Platform to take the place of the National Grange Constitution?" We confess that such a question very much surprised us. We have tried to be very plain in stating that the KANSAS FARMER Grange Platform was intended only to suggest certain changes or reforms we deemed necessary for the perpetuity of the Order. We heartily accept and week after week have given our earnest and cordial support to the Grange Subordinate, State and National, and expect to continue to do so,—at the same time we do not think the most earnest Patrons believe the present organization so perfect that years of experience, trial and discussion will not suggest changes for the better. Further than this, we believe in sustaining all legal and properly constituted forms and ceremonies as they emanate from the proper authorities, reserving the right at all times of freely and independently discussing such as seem to us not for the best. The farmers of the country have never been given so complete or so valuable an organization as the Grange, and it should be most heartily sustained. If changes and reforms are needed—let discussion among the Subordinate Granges through journals identified with the growth and prosperity of the Order, be the means adopted to secure such

reforms. To undertake to shut off such discussion is futile and ill becomes an organization made up of thinking men and women. Concerning the broad principle of republican representation, of doing away with all class distinctions, we have no question of doubt of their ultimately prevailing in the order. In a word, the FARMER, while the most earnest supporter of the Grange organization, is at the same time no blind worshipper of forms and ceremonies, and will continue to advocate plainly and distinctly such changes and reforms in the Order as time and experience may indicate as necessary to give strength and power to the Order. The time has arrived in the history of the organization when even the official action of a State or National Grange must be based upon sound reasoning and equitable principles. Those to whom grave official responsibilities have been given, must not forget that the membership, and not the officers, constitute the Order of the Patrons of Husbandry.

The FARMER has been and will continue to be an independent outspoken champion of the people, and will condemn what it believes to be wrong whether in the Grange or out of it.
EDITOR FARMER.

The Patrons Mutual Insurance Association of Kansas sustained their first loss last week, by damage from lightning to a farm house, in this county. The loss, which was small, was adjusted and damages promptly repaired.

ACTION OF HAYMAKERS GRANGE, GREENWOOD COUNTY.

Secretary A. V. Chapman writes that at a regular meeting of Haymaker Grange, 1856, the Grange adopted resolutions looking to such reformatory changes as are contained in the KANSAS FARMER Grange Platform, which was endorsed by the Grange. Also a resolution urging upon Granges the necessity of building warehouses of their own for storing their surplus grain and other uses of the Grange.

THE ACTION POTTAWATOMIE COUNTY COUNCIL P. O. H.

At a meeting of the County Council of P. O. H., of this County, held at Louisville, on the 20th of April, among other things considered was a resolution to endorse the KANSAS FARMER Grange Platform, which was, after full and free discussion, unanimously endorsed. Also, for various reasons, the organization of County Grange was postponed until the 10th of August.

We like the FARMER for deviating from the old ruts of agricultural papers, of tilling, sowing, reaping, &c., by exposing the thefts and rascality of officials. We hope your boldness will continue to expose fraud and usurpations whenever or wherever they may exist, regardless of who it hurts; throw politics to the wind and give us facts and honesty.

RESOLUTIONS OF MAYFLOWER GRANGE.

At a regular meeting of Mayflower Grange, No. 1808, situated in Paw-paw township, Howard county, Kansas, the following resolutions were unanimously adopted:

Resolved, 1st, That we the officers and members of said Grange are opposed to all degrees above the fourth or working degree, and we regard all others as tending to injure rather than benefit our Order.

Resolved, 2nd, That we refuse to send delegates to the Pomona Grange.

Resolved further, That we are in favor of our National Grange constitution being so amended that any 4th degree member in good standing may be eligible to any office in our Order, either Subordinate, State or National, and that his or her official career shall cease with the term of office for which they were elected, thereby doing away with a privileged class.

Resolved, That a copy of the above be furnished the KANSAS FARMER, and Elk Falls Journal for publication.

By order of the Grange.
J. M. GWIN, Secretary.

Brother O. H. Kelly, Secretary of the National Grange, contemplates bringing out a history of the Order from its inception up to the time of its permanent organization.

Missouri now has 2,030 granges, and they never have reported so punctually since the organization has had an existence in the state, as they did the last quarter. This, in the face of hard times, shows a degree of interest that should satisfy the most ardent worker in the cause.

It is just as important that the Patrons should co-operate in the collecting and disseminating knowledge as in buying and selling property. Every Patron should learn the course of trade and state of every consuming market in which his produce is sold.—*Industrial Age*.

The State Grange of Louisiana, at its last session, laid down the principles and urged the great necessity of united action on the part of all true Patrons in sustaining grange boats, grange stores and grange agencies, and advised the subordinate granges to take such action as would look to this end.

THE VOICE FOR TEXAS PACIFIC RESOLUTION.

Considerable curiosity has been manifested as to the character of the vote in the National Grange on the endorsement of the Texas Pacific Railroad. The proceedings simply state that the resolution was reported and "adopted," but when next day it again came up a division was had on the adoption of the resolution in its amended form, with the following result:

Yeas—Brothers—Allen, Chase, Crew, Clark, Colton, Davis, Felton, Golder, Ham, Jones, Lang, Lewis, Chambers, Cochran, Hamilton, Hinkley, Kitchen, Moore, McDowd, Manger, Mills, Maxwell, Smith, Smedley, Saunders, Taylor, Thompson, N. J., Thompson, Minn., Tenney, Vaughn, White, Whitehead. Sisters—Craw, Clark, Allen, Ellis, Felton, Hall, Adams, Minn., Adams, Ia., Cochran, Jones, Mills, Moore, Smith, Smedley, Taylor, Whitehead.—48.

Nays—Brothers—Aiken, Ellis, Porter, Adams, Ia., Adams, Minn., Dinwiddie, Hemingway, Shankland, Woodman, Wardlaw. Sister—Porter.—11.

The Kansas Farmer.

J. K. HUDSON, Editor & Proprietor, Topeka, Kas.

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"OLD CENTRE", "COUNTRY LAD", "HOOSIER GIRL", W. P. POPE, ALFRED GRAY, PROF. SNOW, PROF. KEDZIE, PROF. MUDGE, and host of other valuable contributors, who will assist in giving the farmers of Kansas a paper not unequalled in the country for originality and merit.

A special and interesting department of the paper will be the short letters from farmers and breeders, fruit-growers and others interested in the various branches of agriculture. The live discussions upon the topics of the day, embracing full and complete information upon every phase of the farmers' movement, will also be a prominent feature of the paper. Specimen copies will be sent free to any address.

FAIRS FOR 1875.

State.	Place of Fair.	Time of Fair.
Kansas.	time not yet determined.	
California.	Sacramento.	Sept. 15 to 20.
Central Ohio.	Mechanicsburg.	Sept. 15 to 20.
Georgia.	Macon.	Oct. 18 to 23.
Illinois.	Ottawa.	Sept. 15 to 18.
Indiana.	Indianapolis.	Sept. 27 to Oct. 2.
Iowa.	Cooke's.	Sept. 28 to Oct. 1.
Louisville Exp.	Louisville.	Sept. 1 to Oct. 16.
Michigan.	East Saginaw.	Sept. 13 to 16.
Montana.	Helena.	Sept. 27 to Oct. 2.
Nebraska.	Lincoln.	Sept. 21 to 24.
New Jersey.	Waverly.	Not yet fixed.
New York.		Not yet fixed.
Northern Ohio.	Cleveland.	Sept. 18 to 17.
Ohio.	Columbus.	Oct. 11 to 17.
Oregon.	Salem.	Oct. 11 to 16.
Southern Ohio.	Dayton.	Sept. 28 to Oct. 1.
Texas.	Houston.	Oct. 30 to 29.
Virginia.	Richmond.	Oct. 30 to 29.
Wisconsin.	Milwaukee.	Sept. 6 to 10.

ENEMIES AND PARASITES OF THE GRASSHOPPER.

From Prof. Riley's very excellent seventh annual report on the "Noxious, Beneficial and other Insects of the State of Missouri," we take the following interesting description of enemies and parasites of the grasshopper. We have also the good news to give to our readers that the Tachina fly has appeared in this locality and is depositing eggs on the festive hoppers, there developing into grubs which penetrate the grasshopper and eat into his vitals. This may be proven by taking the hoppers and enclosing them in a bottle or box. In many cases the grubs may be found and seen by the naked eye upon opening the larger sized live hoppers. We consider this a most encouraging fact for the people of this State, and it also determines without doubt the utter impossibility of these terrible pests devastating the States East of us. We ask of our correspondents throughout the State and in Missouri to examine the hoppers and report whether they are suffering from them or any of the other enemies described below:

ENEMIES AND PARASITES.

It is fortunate for man that, as in the case of most noxious insects, this locust is not without its numerous enemies. Chickens, turkeys, and hogs devour immense quantities, and are happy during years of locust invasion, or whenever these insects abound. Prairie chickens and quails devour them with avidity, and even hunt for their eggs; swallows and blackbirds pursue them unrelentingly; the little snow birds devour great quantities of eggs when these are brought to the surface by the freezing and thawing of the ground, and the same may be said of almost all birds inhabiting the western country in winter; for in the crops of warblers, plovers, snipe and other birds killed by the telegraph wires in the vicinity of Lawrence, Kansas, my friend, G. F. Gaumer, found these eggs last winter. The shrike, or butcher-bird, impales them on to thorns and other pointed substances; and a number of other birds, as well as reptiles, e. g. toads, frogs and snakes, feast upon them. But by far the most effective help in weakening the vast armies of locusts, are the parasitic insects, albeit their work is perhaps less noticeable and less appreciated. Passing over the few, like certain species of digger wasps, belonging to the genus *Scorpa*, which occasionally bury a few specimens as provision for their young; the ferocious *Asilus*-flies, which occasionally pounce upon a specimen and suck out its juices, and the omnivorous ant, which is reported as feeding on the eggs and on the weak, sickly and disabled hopper—it will be well to treat more fully of those parasitic species which render effective service to man in destroying this locust. These consist principally of two mites (class *Arachnida*), which are external feeders, and two dipterous flies belonging to the family *Muscida*, which are internal feeders.

The Silky Mite (*Trombidium sericeum* Say).—Last May, Prof. C. E. Beesey sent me a pale red mite with an account of its attacking the eggs of the Rocky Mountain Locust in northwestern Iowa, and numerous accounts were published of the efficient work of this little animal in destroying said eggs, wherever these had been deposited in Iowa and Minnesota. The following may be quoted as a sample:

A discovery has been made of great interest. A small, red bug, or spider, about the size of a small kernel of wheat, is found in great numbers, creeping into the holes to the grasshopper eggs and eating the contents of the eggs voraciously. Great numbers were found in the act of eating the eggs, with empty eggshells in the same nest. The extent of the little friends is not limited, but they have been seen in many localities in different directions in this place. Mr. J. D. Johnson, Aurora, proved conclusively that these red bugs

are making sure work among the eggs.—*Modoka* (Minn.) Times.

This mite belongs to the genus *Trombidium*, only two N. A. species of which have been described, viz., the *sericeum* Say, and the *sericeum* Say. The descriptions in both instances are very brief, and it is difficult to say whether the species in question, and which is herewith figured belongs to either. It answers to *sericeum*, however, so far as the description goes, and I prefer to so refer it rather than describe it as new. The specimens which I have examined have not been full grown, and the pale red color which they possessed would doubtless have intensified with age. Every European is familiar with the scarlet mite (*T. holosericeum*, L.), which is common in the soil of gardens in spring and preys upon young larvae of various descriptions. In color, allikness and habit it greatly resembles our species and may indeed be identical. All the species of this genus are highly colored and the *Trombidium tinctorum* found in Guinea and Surinam is employed as a dye.

The Locust Mite (*Asoma gryllaria* LeBaron).—This, though a smaller mite, is even a more efficient enemy than the preceding. Almost every one who has paid any attention to the locusts must have noticed that they are often more or less covered, especially around the base of the wings, with small red mites, seldom larger than the head of a pin. These mites have but six legs which, though easily visible when the animal first attaches itself, become more or less obsolete and invisible as it swells and enlarges, though a careful examination will generally reveal them at the anterior end of the body. The mite, therefore, more often presents to the ordinary observer a bright red, swollen, ovoid body, so immovable and firmly attached by its minute jaws; that those who are not aware of its nature might easily be led into believing it a natural growth or excrescence. In fact, it attacks the locust precisely as the different wood-ticks attack man and the lower mammals.

This mite belongs to the genus *Asoma*, briefly characterized by Latreille for a very similar mite (*Asoma parvulus*) which affects the common house fly and several other insects. The specific name *locustorum* was first proposed for it by B. D. Walsh, but Dr. LeBaron afterwards gave it the name of *gryllaria*, in connection with the following more detailed description:

They are of an oblong, oval form, moderately convex and having an uneven surface, produced by four shallow depressions on the upper side, the two larger near the middle, and the others behind them. The body has also two slight constrictions, giving it the appearance of being divided into three segments; but the impressions are superficial and only visible at the sides. The whole surface is finely striate, under the microscope, the striae running in a waving transverse direction. The mouth-organs appear to be reduced to their minimum of development. The only part visible, externally, is a minute papilla, on each side of which are two bristles, the inner of which is stouter, tapering to a acute point, and curved inward, or towards its fellow, on the opposite side. They differ from the majority of *Asomas* in having but six legs, and these, being of but little use in so stationary a creature, are short and slender, projecting but little beyond the outline of the body. They are 6-jointed in reality they are 5-jointed, the middle joint much the shortest, and the terminal joint longest.—C. V. R., garnished with short stiff bristles, and terminate in two slender, curved hooks. The anterior and middle legs are closely approximate and situated near the anterior extremity of the body; the posterior are set a little nearer to each other, and a little in advance of the middle of the body being inserted at the posterior part of the anterior division or lobe. Four hairs project from the posterior extremity of the body.

THE ANONYMOUS TACHINA-FLY.

Our Locust, like so many other insects, is also subject to the attacks of certain two-winged flies much resembling the common house-fly, but larger. One is the very same Tachina fly (*Tachina anomala*) which I have bred from a number of other insects. I first reared this fly from specimens of the Rocky Mountain Locust sent me by Joe. C. Shattuck, Vice President of the Union Locust, Greely, Col., who wrote July 14, 1875, as follows of its work:

* * * Also, I will say that the grasshoppers which a month since seriously threatened to devour every green thing, have met with a mortal foe, and been slain by millions. (Don't think "millions" to large a word.) Very few have "taken to themselves wings and flown away," as heretofore, but lie dead in the fields they lately ravaged. A small fly pierces them, and deposits an egg while on the wing, (or on the jump) and like Herod of old "they are eaten of worms and give up the ghost."

The following items undoubtedly refer to the same insect:

GRASSHOPPER-EXTERMINATING FLY.

It seems that the grasshoppers that are so destructive to vegetation in many places in the central portion of the continent, are likely to find an enemy, which threatens their rapid destruction. The Deer Lodge Independent says that a fly has made its appearance, closely resembling the common house fly, but much larger, and of a gray, mottled color, which deposits its eggs under the wings of the grasshopper. The egg is enclosed in a glutinous substance, which secures it in its position until the worm is matured [embryon developed]. It then penetrates the body of the grasshopper, which speedily dies. The worm then burrows in the ground, and at the end of seventeen days comes forth a fly, ready to again commence the work of destruction. Mr. Wm. Walker, of Dempsey Creek, informs the Independent that twice during the past summer the grasshoppers threatened to destroy his crops, but the flies killed them so rapidly that they did him but little damage. As the grasshoppers were killed before depositing their eggs, it is generally believed that this plague is ended in the Deer Lodge Valley. (Published in several Montana papers in Summer of 1874.)

A great many of the locusts seem to be punctured on the back, and on pulling their heads off after death (many were found dead) from 1 to 3 ordinary looking maggots would be found. Many farmers fear it might be an introduction of a new plague. May not this gentleman with his little snail in time prove the destroyer of the hateful locust?—(R. P. C. Wilson, Platte City, Mo., in private letter.)

I saw a hopper kicking about as if he could hardly move; I pulled him to pieces and found that he contained a footless grub, half an inch in length. In a short time more were procured, placed in a covered tumbler, where in a little more than two weeks the grubs changed to Tachina flies, very much resembling the common house flies. * * * When we remember what an enormous number of eggs (fly-blows) a fly will lay and that each, in about a month, will be a perfect fly, it is seen that it would take but a few generations to

clean out an army of grasshoppers.—[Oscar J. Strong, Rolfe, Pocahontas county, Iowa, in Western Farmer, Feb., 1869.]

Mr. Byers, in speaking of the locusts hatching in Colorado in 1865, (loc. cit.) says: "That upon attaining about half their full size, they were attacked by a fly, which, stinging them in the back between the roots of the wings, deposited one or more eggs, which produced a large white maggot. The worm subsisted upon the grasshopper, finally causing its death, when it cut its way out and entered the earth. In this way probably half were destroyed, often covering the ground and filling the furrows in plowed fields with their carcasses. When the remainder took to flight, moving southeast, when their wings were sufficiently developed, and we lost trace of them on the great Plains."

Mr. J. W. Crow, of Biglow, Mo., in his correspondence with me, describes these maggots as infesting the "hoppers" in Holt county last Fall; and in 1869 I received the parasite from John P. Dope, of Rock Port, Atchison county, and have bred it from the Differential Locust (*Blattella carolina*, L.) in St. Louis county.

Finally, Mr. S. E. Wilber, of Greely, Col., has published an account of what is evidently the same fly. In this account, after showing how persistently the fly pursues the locust—leaving it no rest, and so effectually weakening whole swarms as to render them harmless—he expresses the opinion that the constant importunities, and annoyances of this fly are the cause of locust migrations. While, however, they may constitute a factor in the result, such a conclusion is too sweeping.

The red-tailed Tachina-fly which is so useful in destroying the Army worm will serve to illustrate the species, and, indeed, differs scarcely at all except in having the tip of the abdomen red.

These Tachina flies firmly fasten their eggs—which are oval, white and opaque and quite tough—to those parts of the body not easily reached by the jaws and legs of their victims, and thus prevent the egg from being detached. The slow-flying locusts are attacked while flying, and it is quite amusing to watch the frantic efforts which one of them, haunted by a Tachina-fly, will make to evade its enemy. The fly buzzes around, waiting her opportunity, and when the locust jumps or flies, darts at it and attempts to attach her egg under the wing or on the neck. The attempt frequently fails; but she perseveres until she usually accomplishes her object. With those locusts which fly readily, she has even greater difficulty; but though the locust tucks suddenly in all directions in its efforts to avoid her, she circles close around it and generally succeeds in accomplishing her purpose, either while the locust is yet on the wing, or more often, just as it alights from a flight or a hop. The young maggots hatching from these eggs eat into the body of the locust, and after rioting on the fatty parts of the body—leaving the more vital parts untouched—they issue and burrow in the ground, where they contract to brown egg-like pupae, from which the fly issues, either in the same season or not till the following spring. A locust infested with this parasite is more languid than it otherwise would be; yet it seldom dies till the maggots have left. Often in pulling off the wings of such as were hopping about, the bodies have presented the appearance of a mere shell, filled with maggots; and so efficient is this parasite that the ground in parts of the Western States is often covered with the Rocky Mountain Locust dead and dying from this cause.

THE COMMON FLESH FLY.

(*Sarcophaga carnaria*, Linn.)—This fly, which is at once distinguished from the Tachina-fly by the style of the antenna being hairy instead of smooth, is also a great enemy of the Rocky Mountain Locust, though I think it must be looked upon more as a scavenger than an active parasite, and that it is attracted more especially to those specimens which are feeble or already dead. I have received it among the Tachina parasites sent by Mr. Shattuck from Colorado, and from Prof. C. E. Beesey, of Ames, Iowa, who bred it from the Differential Locust, and published the following description of its work:

A COMMENDABLE FLY.

During the Summer I noticed that many of the large yellow grasshoppers (*Calopteryx diffracta*) were infested by the maggot of a species of fly very nearly resembling, if not identical with the common flesh-fly (*Sarcophaga carnaria*). Many of the grasshoppers were almost completely eaten out when found, retaining just sufficient strength to hop feebly over the ground. I estimate that this particular species of grasshopper was diminished in numbers at least one-tenth, possibly one-eighth by these new friends. It is to be hoped that these new parasites will increase rapidly. Prof. C. V. Riley informs me that the Migratory Locust (*Calopteryx opacipes*) is also infested by a similar one; thus far, however, I have failed to detect any in the specimens collected in this vicinity.

I have also bred it from a number of our native locusts whose carcasses—fornaken by the voracious larvae—may quite frequently be seen fastened to the upright stems of different plants, in the Fall of the year. I have also bred it from the common Carolina Mantid, which it attacked while living; and have known it to infest the common Walking-stick (*Specterum femoratum*). Indeed, the species is a most widely-spread and general scavenger, occurring in most civilized countries, and feeding as a rule on dead and decaying animal matter, and only exceptionally on living insects. By way of illustrating its transformations, I introduce a figure of the *Sarracenia* fly (*Sarcophaga sarracenia* Riley) which feeds on the dead insects caught in those curious traps, the trumpet leaves (*Sarracenia*) and which so closely resembles the common flesh-fly in question, that it is probably only a variety. These flies deposit living larvae, which are distinguished from those of the Tachina-flies by being more concave and truncated at the posterior end. The Tachina larva is rounded posteriorly, with a small spiracular cavity, easily closed, and having a smooth rim: it contracts to a pupa which is quite uniformly rounded at each end. The *Sarcophaga* larva is more truncate behind, with fleshy warts on the rim of the spiracular cavity, and with a more tapering head: it contracts to a pupa, which is also truncate behind, and more tapering in front, where the prothoracic spiracles show as they never do in Tachina.

A manufactory of plaster paris is in vogue at Blue Rapids, Kansas. The article of plaster paris and land plaster is said to be superior to the imported article.

Kansas is to have a competing line of railroad to Pueblo, Colorado. The Atchison, Topeka & Santa Fe will be completed to that point in July.

Minor Mention.

SEVENTH ANNUAL REPORT OF PROF. CHAS. V. RILEY, STATE ENTOMOLOGIST OF MISSOURI.

We thank Prof. Riley for the compliment of a copy of his valuable report. This report alone is worth more in dollars and cents to the people of Missouri than the office of Entomologist has cost that State since it was established. Prof. Riley is very favorably known to the people of Kansas. His labors in Missouri have been of value to our State and very largely assisted in developing a large and growing interest in the Science of Entomology, so nearly related to Agriculture.

The Report of the State Board of Agriculture.—The condition of the crops, the weather, the extent of the grasshopper ravages, are all matters of so much importance and interest to our readers that we believe no apology is necessary for transferring to our columns the valuable report of the State Board of Agriculture. The report is very full and the result of a great deal of labor.

Bitters.—For the benefit of our temperance friends who take theirs in "bitters," we give the following information free. The State Assayer of Rhode Island, says that "Hostetter's Bitters" contain 43.8 per cent. alcohol. "Flint's Quaker Bitters" 20.54 per cent. alcohol. "Drake's Pantonian Bitters" 30.24 per cent. alcohol, and "Dr. Walker's Vinegar Bitters" 17.23 per cent. alcohol.

KANSAS ENTERPRISES.

Mr. E. P. Moulton, living seven miles west of Baxter Springs, has invented a combined plow, harrow, roller and corn-planter.

When the building of the dam across the Kansas river became a certainty, the Kimball Brothers conceived the idea of constructing a roadway of some kind, whereby the power it would afford, might be used to run their foundry and machine shops, which are located some thirty rods above it; and for this purpose, they set about drawing plans and figuring to get at the most feasible plan for such construction. At first it was thought that by tunnelling a horizontal shaft directly from the foundry to the outlet of the dam, their purpose might be consummated in a satisfactory manner, but by trial it was found that to carry this plan to a successful termination, too great an expense would be incurred and it was abandoned for the less expensive yet equally as effective plan that has finally rewarded their efforts.—*Spirit of Kansas*.

The foundry company has just put in a new forty-horse power engine. This is the third attempt the company has made to supply itself with an engine of sufficient power to accommodate its continually increasing business. On former occasions somebody wanted the new engine as soon as it was completed. Every part of the machinery of the engine now running the foundry, has been built in the shop it is now driving. It is quite enough to say that it does its work as well as any engine could, and that the company can duplicate it to any person wanting such an article, as cheap as any shop in the county.—*St. Scott Monitor*.

The main shaft at the lead mines is now nearly one hundred and fifty feet in depth, and just passing through an immense deposit of black jack. The prospects are better than ever. The miners predict the discovery of a vein of lead just beneath. In these mines we have an element of exceeding great wealth, which when developed will be worth ten thousand county seats.—*Pleasanton Observer*.

John C. Bunnell, late of Topeka, Kansas, but now of Burlington, Iowa, has been sojourning with us the past week, improving his timber claim. He has just completed re-planting 4 acres in trees, and planted 7 acres additional, and with 9 acres planted in walnuts makes 20 acres already broken and planted. Mr. Bunnell expects to reside on the land in about two years.—*Larned Press*.

Some fifteen families of immigrants came into town on Monday. They came with good wagons, stock, &c., and looked as if they were the desirable kind of immigration. They came from Central Illinois and were headed for Ellis county, but about come to the conclusion that the country in this vicinity was just right, and they will probably settle near Balla.—*Ballu County Journal*.

Mr. M. Sargent, who lives in Labette township, has just brought from Illinois, four very fine Leicester sheep upon which the wool is from 8 to 10 inches in length and of a very superior quality. He also brought 17 other sheep of the very best stock. This is the kind of farmers we want in the county for it is such that build up and make the community prosperous.—*Parsons Sun*.

Eldorado boasts of a water power flouring mill and steam saw mill, a tannery, broom factory, furniture factory, and a wagon and carriage shop. We want a cheese factory next.—*Times*.

"Paola is erecting a large and commodious building for a cheese factory."

"Paola has a match factory which manufactures about 40,000 matches every day. Another Kansas industry."

"Paola has a pump factory which is turning out the best article in use in the State."

The first paper manufactured at the new mill of Messrs. G. & J. Green was exhibited last Monday. It was wrapping paper, strong and thick, and the proprietor is emphatic in his assertion that its quality can be improved. We shall soon know what the new mill is capable of.

A short time since we took occasion to visit the new flouring mill of Messrs. Howard & Greenman, located on the Little Blue—at Waterville.—*Blue Rapids Times*.

A cheese factory has been started at Mount Roy, Brown County. The shares of stock are \$25, and sixty shares, making \$1,500 have been taken. J. N. Mills holds a majority of the shares. The factory will have the capacity to use up the milk of 300 or 400 cows, but expect to start with about 300. So says the *Watena Reporter*.

Blandon & Smith have gone into the sheep business extensively in Chase County.

Mr. Mossman, near Wichita, has a fine bed of strawberries about an acre in extent.

Crop Reports.

RENO Co., Kan.—This is a new grasshopper eaten county, but we have many broad acres of fall wheat that looks well, although it was somewhat thinned out by winter killing. A very large amount of oats had been sown and looks well. There has been but very little spring wheat sown. We have some fears of chinch bugs, unless we have heavy rains during the next month. No young hoppers here, nor do we look for them, as the old ones left before depositing their eggs. Considerable corn planted in the earlier part of April will have to be planted over, owing to cold rains and the wire worms. Upon the whole, our prospects for a good crop are very promising. I think that our greatest need here will be mills to do our grinding. Hutchinson should have two mills where now she has none. JAS. A. MOOR.

ROSSVILLE, Shawnee Co., Kan., May 11.—Winter wheat was badly injured in March; about one-third has been plowed up, and of the balance there is about half a stand—large amount sown. Rye is looking splendid, and a very large acreage sown. Spring wheat, oats and barley—good; less spring wheat sown than last spring. Considerable flax sown. Corn planting commenced about the twentieth of April, and is well advanced, and coming up fine. The hoppers are taking some fields as fast as it comes up, but think they will do no serious damage, except to flax and gardens. H. F.

M. C. H. Taylor, of Lawrence, asks: "Would it not be well to agitate the introduction of sparrows at State or Grange expense. One pair in each school district would, in a very few years, increase to such an extent as to put a check on hoppers and other insects. I should like to see the FARMER agitate it."

Mr. C. S. Broadbent, of Kansas, is traveling in Texas, and in a recent letter to the *Winfield Courier* says: "All along the route the crops were affected by dry weather, the same as in Kansas, and insect pests are here as well as there. But the landscape here is more beautiful than any in Kansas; timber and rock are more plentiful, and the water is clearer. Some of the streams become dry in the drouthy season, and stock has to go a long distance for drink."

KANSAS FARMER: As the all absorbing topic of the day is grasshoppers, let me give a few facts regarding their visit in 66-7. I kept no record of their movement in fall of '66, but think they began their depredations in October, and were with us until cold weather put a stop to them. In the spring of '67, I kept a record of their movements; and they made their first appearance on the 6th or 7th of June, not as this year by hatching out in our midst, but coming among us full grown from the west, doing but little injury to corn or wheat, but making a clean sweep of garden truck. They continued their depredations, some days more than others, for about a month and then suddenly disappeared. Their course this year is entirely different; they hatched with us at least six weeks earlier than they did then. The question now is, will they disappear at the end of the month, as they did then. If so we will be in time for a crop. I give these hints in order to draw out the views and experience of others. Can we form any opinion from their actions in the past?

At our last Grange meeting, the subject for discussion was, "In view of the drouth and grasshoppers, what shall we plant?" and the opinion expressed by a large majority of the speakers was in favor of sorghum, as producing more stock feed for the labor bestowed. "The drouth has very little effect on it and grasshoppers shun it entirely. WYANDOTTE.

EDITOR FARMER:—It would seem invidious and unbecoming in an old Kansan to select any one portion of our fair State, and cant its praises to the depreciation of other portions of our lovely and fertile domain. I shall not do it, therefore, for I have seen but little land within the limits of our commonwealth, that, in my judgment, should be depreciated. But while I say this, candor compels me to add that that portion of the State called "Southwestern Kansas," which is embraced in the counties of Chase, Harvey, Marion, Sedgwick, Sumner, Butler and Cowley is the garden spot of the State.

I travelled through a portion of this territory some ten years ago, and saw the land when it was "virgin soil," and I have recently meandered over a portion of the same, and at a time of the year when I could test the capabilities of the soil and climate. I am forced, therefore, by conviction, to repeat the declaration that the portion of the State named, is, in fertility and beauty, a garden.

The devastation last year by drouth, bugs and locusts was appalling; but the recuperative power of such a soil, climate and people, is great indeed.

During my recent trip, I have looked upon tens of thousands of acres of wheat and rye, which give a fairer prospect of an abundant harvest than I have ever seen elsewhere—and my observation has not been limited—early in May. The rye, on the 24th of the month, was headed out, and the wheat in Cowley and Sumner counties was rapidly approaching that condition. The corn is well up, and growing; and the other cereals, as well as grasses and vegetables, all give promise of an abundant harvest.

I heard no complaint of young grasshoppers in this great region. All the tillers of the soil were full of hope, and the dealers in reapers and threshers were plying their business with great vigor.

On some future occasion, I may write you again on the territory named in this hasty letter, and give your readers a history of its many water courses, and thriving towns. C. R.

MONTHLY REPORT OF THE KANSAS STATE BOARD OF AGRICULTURE.

CONDITION OF CROPS, STOCK, FRUIT PROSPECTS, GRASSHOPPERS, ETC.

Compiled from returns made to the State Board of Agriculture, by officers of County Agricultural Organizations, County Councils of the Patrons of Husbandry, and other correspondents on the 1st day of May, 1875.

COUNTIES.	Wheat	Barley	Oats	Corn	Hay	Stock	Grasshoppers	Condition of crops	Condition of stock	Condition of grasshoppers
Allen	80	97	100	100	100	100	100	100	100	100
Anderson	107	100	100	100	100	100	100	100	100	100
Atchison	100	100	100	100	100	100	100	100	100	100
Baxter	100	100	100	100	100	100	100	100	100	100
Bell	100	100	100	100	100	100	100	100	100	100
Beverly	100	100	100	100	100	100	100	100	100	100
Boonville	100	100	100	100	100	100	100	100	100	100
Butler	100	100	100	100	100	100	100	100	100	100
Calderwood	100	100	100	100	100	100	100	100	100	100
Carroll	100	100	100	100	100	100	100	100	100	100
Cherokee	100	100	100	100	100	100	100	100	100	100
Chickasaw	100	100	100	100	100	100	100	100	100	100
Clatsop	100	100	100	100	100	100	100	100	100	100
Crawford	100	100	100	100	100	100	100	100	100	100
Dickinson	100	100	100	100	100	100	100	100	100	100
Douglas	100	100	100	100	100	100	100	100	100	100
Franklin	100	100	100	100	100	100	100	100	100	100
Harvey	100	100	100	100	100	100	100	100	100	100
Howard	100	100	100	100	100	100	100	100	100	100
Jefferson	100	100	100	100	100	100	100	100	100	100
Johnson	100	100	100	100	100	100	100	100	100	100
Labette	100	100	100	100	100	100	100	100	100	100
Leavenworth	100	100	100	100	100	100	100	100	100	100
Linn	100	100	100	100	100	100	100	100	100	100
Lyon	100	100	100	100	100	100	100	100	100	100
Marion	100	100	100	100	100	100	100	100	100	100
Miami	100	100	100	100	100	100	100	100	100	100
Mitchell	100	100	100	100	100	100	100	100	100	100
Montgomery	100	100	100	100	100	100	100	100	100	100
Nemaha	100	100	100	100	100	100	100	100	100	100
Noel	100	100	100	100	100	100	100	100	100	100
Osborne	100	100	100	100	100	100	100	100	100	100
Ottawa	100	100	100	100	100	100	100	100	100	100
Pottawatomie	100	100	100	100	100	100	100	100	100	100
Reno	100	100	100	100	100	100	100	100	100	100
Republic	100	100	100	100	100	100	100	100	100	100
Rice	100	100	100	100	100	100	100	100	100	100
Riley	100	100	100	100	100	100	100	100	100	100
Rock	100	100	100	100	100	100	100	100	100	100
Russell	100	100	100	100	100	100	100	100	100	100
Saline	100	100	100	100	100	100	100	100	100	100
Sedgewick	100	100	100	100	100	100	100	100	100	100
Shawnee	100	100	100	100	100	100	100	100	100	100
Smith	100	100	100	100	100	100	100	100	100	100
Sumner	100	100	100	100	100	100	100	100	100	100
Wabasha	100	100	100	100	100	100	100	100	100	100
Wilson	100	100	100	100	100	100	100	100	100	100
Woodson	100	100	100	100	100	100	100	100	100	100
Wyandotte	100	100	100	100	100	100	100	100	100	100
State Average	104	104	101	100	99	76	95	96	70	88

The "Condition" of the several crops on the first day of May is made in comparison with an ordinary or fair average crop. In reporting acreage, condition of animals, or product, in comparison with former years, or in comparison with an average crop, or in average condition, 100 is made the basis; an increase of one-tenth, or ten per cent, is recorded 110; and a decrease of five per cent, marked 95, etc.; but when the reporter has not sufficient data for an estimate, the space is left blank.

Wheat crop reported a total failure.

A few county reports were not received until about the 15th of May, which delayed this report accordingly.

TABLE,
Showing Weather Record for January, February, March and April, at the stations named.

STATION.	Latitude.	Longitude.	Altitude.	Mean Temperature of month.	Max. Temperature of month.	Min. Temperature of month.	Rainfall for month.	Name of person reporting.
Atchison	39° 43'	95° 12'	1000	14° 10'	45° 10'	-18°	1.80	H B Horn
Baxter Springs	37° 28'	94° 37'	830	22° 13'	53° 10'	-10°	1.30	Wm Hyland
Independence	37° 58'	95° 46'	2226	4° 12'	19° 38'	-10° 42'	0.15	Jno M Altaffer
Kinsley	38° 06'	95° 37'	1028	30° 9'	52° 30'	-16°	0.15	J A Walker
Near Leroy	38° 06'	95° 37'	1028	30° 9'	52° 30'	-16°	0.15	J G Shoemaker
Fort Larned	38° 06'	95° 37'	1028	30° 9'	52° 30'	-16°	0.15	S G Cowdrey
Lawrence	38° 06'	95° 37'	1028	30° 9'	52° 30'	-16°	0.15	F H Snow
Leavenworth	39° 12'	95° 45'	1050	15° 07'	45° 10'	-17°	0.32	W K Kedzie
Manhattan	39° 12'	95° 45'	1050	15° 07'	45° 10'	-17°	0.32	R B Foster
Osborne City	39° 12'	95° 45'	1050	15° 07'	45° 10'	-17°	0.32	Wm Pettis
Salina	39° 12'	95° 45'	1050	15° 07'	45° 10'	-17°	0.32	Chas F Swallow
Wallace	39° 12'	95° 45'	1050	15° 07'	45° 10'	-17°	0.32	Chas F Swallow

FORT LEAVENWORTH.—The rainfall at Fort Leavenworth for the first four months of the last thirty-eight years, 1837 to 1874, inclusive, was 6.99 inches; for 1874, 5.41 inches; for February, March and April 1875, 5.42, January not reported.

BAXTER SPRINGS.—First four months for six years, 1868 to 1873, inclusive, 9.88 inches; for 1875, 12.87 inches; 1874 not reported.

FORT LARNED.—First four months for five years, 1870 to 1874, inclusive, 3.62 inches; for 1874, 5.87 inches; for 1875, 9.02 inches.

LAWRENCE.—First four months for seven years, 1868 to 1874, inclusive, 7.38 inches; for 1874, 5.46 inches; for 1875, 6.07 inches.

MANHATTAN.—First four months for seven years, 1867 to 1873, inclusive, 4.41 inches; for 1875, 3.80 inches; 1874 not reported.

FORT WALLACE.—For first four months for four years, 1871 to 1874, inclusive, 2.30 inches; for 1874, 1.43 inches; for 1875, 2.84 inches.

EASTERN BELT.—The average rainfall for the first four months of 1874 was 4.99 inches; for 1875, 7.05 inches.

MIDDLE BELT.—For first four months of 1874, 5.18 inches; for 1875, 3.75 inches; Fort Hays had in 1874, during the first four months, a rainfall of 12.83 inches. No report for 1875, and that station is not in the average for 1874.

WESTERN BELT.—Fort Wallace is the only station in this belt that has reported for both years; rainfall for first four months of 1874, 1.43 inches; for 1875, 2.84 inches.

Attention Farmers!
TO RENT, the Young farm in Sec. 22, Town 12, Range 16, 4 miles S. E. of Topeka. Inquire at office
KANSAS LOAN & TRUST CO.
GEORGE M. NOBLE.

Relief for Hard Times.
For Loans upon Real Estate of \$500 and upwards (East 6th P. M.), when you want the money without waiting, and at equitable rates. Apply to the **KANSAS LOAN & TRUST CO.** Topeka, Kansas

NOTICE.
Hedge Plants for sale, 2 miles Southwest of Topeka, on Burlington road, by H. W. CURTIS.

THE PROMINENT ADVANTAGES OF THE NEW LOW RESERVOIR "STANDARD"

Are Economy in Price,
Superior Construction,
Quick & Uniform Baking.

**Great Durability & Handsome Designs,
And Giving PERFECT SATISFACTION Everywhere.**

MADE ONLY BY
Excelsior Manufacturing Company,
612, 614, 616 & 618 N. MAIN STREET ST. LOUIS, MO.
AND SOLD EXCLUSIVELY BY
A. W. KNOWLES & CO.,
TOPEKA, KANSAS.

DON'T HACK, HAKE, COUGH, COUGH!
Cough is a symptom by which various diseased conditions of the throat, bronchial tubes and lungs manifest themselves. But whether it arises from the irritation produced in the throat and larynx by taking cold, from an attack of Bronchitis, from incipient consumption, or from various other causes, nothing will allay it more speedily or cure it more permanently than Dr. Pierce's Golden Medical Discovery. It does not matter whether it be a recent attack or a lingering cough, the Discovery is in either case equally well adapted for its relief and permanent cure. In fact it will cure a cough in one-half the time necessary to cure it with any other medicine, and it does it, not by drying it up, but by removing the cause, subduing the irritation, and healing the affected parts. No time should be lost in commencing the use of a proper medicine for the relief of a cough, for unless this course is pursued, serious and dangerous disease of the lungs is liable to result. Golden Medical Discovery is sold by all dealers in medicine.

The season is rapidly approaching when our farmers will be making their arrangements to secure Threshing Machines, Reapers, Mowers, and other implements which in this day of progress have become indispensable to successful agriculture.

The demand for machinery that will do its work well, and at the same time expeditiously, is growing throughout the Agricultural districts of the Western States and Territories. With a view of becoming somewhat acquainted with the number and magnitude of establishments engaged in the manufacture of implements of this character, we visited a few of the leading and most noted manufacturers, during the past months. From statistics that were placed in our hands, we find that in 1874, ninety-eight different and distinct establishments in the United States, were engaged in the manufacture of Reapers and Mowers alone, who made during that year 100,000; out of this large number, 25,000 were manufactured by three firms, viz: C. A. Lunt & Co., of Canton, Ohio; A. Lunt & Co., of Akron, Ohio, and Adams, Platt & Co., of Poughkeepsie, New York.

These firms manufacture the justly celebrated "Buck-eye" Reaper and Mower, which has a national reputation for its superiority, in every State and Territory. Over 200,000 are now in use in this country.

These machines, and also the celebrated Walter A. Wood mower and reaper, and the Elward Harvester, and all kinds of agricultural implements are for sale at the Agricultural House of W. W. Campbell & Bros., Topeka, Kansas.

New Advertisements.
In answering an Advertisement found in these columns, you will confer a favor by stating you saw it in the KANSAS FARMER.

OFFICE OF
WM. B. GRIMES,
Tres Palacios
Rendering & Packing
HOUSE,
And Dealer in
General Merchandise
Post Office Address, Box 20,
Indianola, Texas.

**RUE'S PATENT
Hand Cultivator**
RECEIVED THE PREMIUM at five State Fairs—St. Louis, Mo.; Mansfield, O.; Cleveland, O.; Erie, Pa.; Indianapolis, Ind. Has a movable beam; rakes, hoes, scrapes the sides of sweet potato ridges; cuts runners; does all that any other hand plow does. It is a wrought iron frame; steel implements.
Send for circular.
MADE BY GEO. W. RUE, Hamilton, O.
Sample machine may be seen at W. W. Campbell & Bros., Topeka, Kansas, General Agents.

SWEET POTATO PLANTS.
Prepaid to any Express Office in the State,
Yellow Namond per 1,000 \$3.00
Red 3.00
Southern Queen 3.00
Red Bermuda 3.00
Brazilian 3.00
Red Spanish 3.00
Purple Yams 3.00
Sugar Yams 3.00
In lots of 4,000 a variety may be selected from list for \$10.
E. C. CHASE,
Glenwood, Johnson Co., Kan.

EAGLE
This work now in press is intended to take the place of all other books used by the Secretaries of Subordinate Granges. It systematizes the accounts and shows the standing of Granges for each quarter. Gives a full and complete memorandum of each and shows all important business, discussions, socials, etc. occurring during the year.
This book is copy-righted and jointly published at the office of the KANSAS FARMER.
Sent to One Address for One Dollar.
NOW BEING PREPARED FOR PRESS.
TO BE ISSUED IN
SEPTEMBER FOR THE YEAR 1876,
Hudson's New and Complete.
SYSTEM OF FARM ACCOUNTS.

Great Public Sale
of
SHORT-HORN CATTLE!
WE WILL SELL, without reserve or by bid, at our farm and residence, adjoining
Cambridge City, Indiana,
FRIDAY, MAY 28th, 1875,
near 60 head of Short-horn cattle of various ages. This is the oldest established herd in the State; the breeding and selection having been guided by an experience of 20 years. The class of stock now offered is such as we are proud to offer the farmers and breeders of the country—some of them being a part of our show herd, which has been so successful at many of the leading fairs. There will be several imported animals in the list, headed by
BRITISH BARON 13557,
one of the attractive features of the sale, a celebrated breeding bull and prize-winner, together with some prize cows of established reputation. There will be several females of choice blood, bred in Canada; also, representatives from the following popular families:
Manukas, Craggs, Rose of Sharon, Victoria, Gwynne, Miss Marguerite, Frances, Young Marys, Zedias, Delmas, etc., etc., embracing an exceedingly choice and useful stock of desirable age.
Cambridge City is easy of access by rail from all directions, having direct communication with Indianapolis, Ft. Wayne, Chicago, Louisville, Ky., Columbus and Cincinnati, Ohio.
Terms.—Six months' credit on approved paper, bearing interest at the rate of 5 per cent. per annum. A discount for cash will be allowed at the rate of six per cent. per annum.
Catalogue will be ready about May 1st. Sale begins at 10 o'clock M.
Col. J. W. JUDY, Auctioneer.
The Indiana Short-horn Convention meets at Indianapolis, Ind., Tuesday and Wednesday, May 25 and 26.
LOWDER'S SALE THE DAY BEFORE:
Thursday, May 27, 1875, the day preceding our sale, Chas. Lowder, of Plainfield, Hendricks Co., Ind., will sell about seventy-five head of Short-horn cattle, at the Fair Grounds, Indianapolis, Ind.

Market Review.

OFFICE OF THE KANSAS FARMER,
TOPEKA, KAN., May 26, 1875.

Topeka Money Market.
BONDS.
Kansas Pacific Gold Bonds, May and Nov. 1875, 100 00
Kansas Pacific Gold Bonds, June and Dec. 1875, 100 00
Kansas Pacific Gold Bonds, Jan. and Aug. 1876, 100 00
Kansas Pacific Income Bonds, No. 1, 100 00
Atchison, Topeka & Santa Fe First Mortgage Bonds, 100 00
LOCAL SECURITIES.
Kansas 7 per cent Bonds, 100 00
Kansas 6 per cent Bonds, 100 00
State Warrants, 100 00
County Warrants, 100 00
County 7 per cent rail-road Bonds, 100 00
Improvement Bonds, 100 00

Topeka Grain Market.
Corrected weekly by Kewer & Foucht.
Wholesale cash prices from commission men, corrected weekly by Kewer & Foucht.
WHEAT—Per bu. Spring, for seed 1.10
Fall, No. 1 1.20
No. 2 1.10
No. 3 1.00
No. 4 95
CORN—Per bu. Mixed 90
White, No. 1 85
Yellow 80
OATS—Per bu. No. 1 75
RYE—Per bu. 60
BARLEY—Per bu. 50
FLOUR—Per 100 lbs.—Fall, No. 1 4.00
Fall, No. 2 3.75
No. 3 3.50
Low Grades 2.40 2.75
CORN MEAL—Per 100 lbs. 2.10 2.30
Corn Chop 1.90
Corn and Oats Chop 1.90
Wheat Chop 1.00 1.20

HIDES, SKINS AND PELTRY.
Corrected weekly by Harstock & Gossett, and Bickel & Kraus, Dealers in Hides, Furs, Tallow and Leather.
HIDES—Green 1.00 1.10
Dry Flats 1.20 1.40
Dry Salt 1.20 1.40
Green Salt Cured 90
Calf, Green Salt Cured 80
Kip, Green Salt Cured 70
Sheep Pelts, green 1.00 1.10
TALLOW 1.00 1.10
SKINS—Timber Wolf 1.00 1.10
Prairie Wolf 75 .85
Other 4.00 5.00
Mink 1.20 1.50
Raccoon 80 .90
Badger 60 .70
Wild Cat 50 .60
Muskrat 1.00 1.10
Skunk, Black 50 .60
Small Striped 40 .50
Opussum 20 .30
Deer, dry, per lb. 80 .90
Beaver dry and clean, per lb. 1.00 1.15

Topeka Produce Market.
Grocers retail price list, corrected weekly by Davies & Manpeaker.
APPLES—Per bu. White Navy \$5.00 5.50
Medium 4.50 5.00
Common 4.00 4.50
Butter—Per lb. Choice 1.40 1.50
Common Table 10
Medium 08
Common 06
EGGS—Per doz.—Fresh 50
HOMINY—Per bu. 5.50 6.00
VINEGAR—Per gal. 1.00 1.10
POTATOES—Per bu. 1.00 1.10
POULTRY—Chickens, Live, per doz. 8.00
Chickens, Dressed, per lb. 10.00 12.00
Turkeys, ... 10.00 12.00
Geese, ... 10.00 12.00
RACON—Per lb.—Shoulders 1.50
Clear Sides 1.50
Hams, Sugar Cured 1.50
Breakfast 1.50
LARD—Per lb. 80
CABBAGE—Per head 10
ONIONS—Per bu. 1.00
SEEDS—Per bu.—Hemp 1.00
Millet 1.00
Blue Grass 1.00
Timothy, prime 2.00
Common 2.00
Clover 7.00 7.50
Hungarian 1.75
Georgia Orange 2.00 2.25
Corn 50 60
Oats 50 60
Onion Sets per lb. 50 60

Kansas City Market.
KANSAS CITY, May 25, 1875.
GRAIN.
The following are wholesale cash prices from commission men.
WHEAT—Per bu.—Spring Red 1.07 1.10
Fall, No. 4 1.25 1.30
Fall, No. 3 1.20 1.25
Fall, No. 2 1.15 1.20
CORN—Per bu.—New White 80 85
Yellow 75 80
Mixed 70 75
OATS—Per bu.—No. 1 60 65
RYE—Per bu.—No. 1 50 55
No. 2 45 50
BARLEY—Per bu.—No. 1 1.10
No. 2 1.05

PRODUCE.
APPLES—Per bu. 5.00 5.50
BUTTER—Per lb.—Choice 30
Medium 25
BROOM CORN—Per ton 150.00 200.00
CHEESE—Per lb. 10.00 12.00
CIDER—Per bu. 1.00 1.10
EGGS—Per doz.—Fresh 50
Pickled 40
FEATHERS—Per lb. Prime Live Geese 80 .90
FLOUR—Per cwt.—Rye 2.50 3.00
Wheat 2.50 3.00
XXX 2.50 3.00
XXXX 2.50 3.00
CORN MEAL—Per cwt. Kiln dried, per bu. 1.70 1.80

LIVE STOCK.
CATTLE—Extra, av. 1,200 to 1,500 5.50 6.00
Prime, av. 1,200 to 1,500 5.00 5.50
Fair to Good, av. 1,200 to 1,500 4.50 5.00
Native Stockers, av. 1,000 to 1,500 3.75 4.25
Medium Native Stockers 3.25 3.75
Good butchers' cows 4.00 4.50
Medium butchers' cows 3.50 4.00
Texas Cows, fat av. 800 to 900 3.25 3.75
Corn fed Texans, fat av. 1,000 to 1,500 3.50 4.00
Colorado Texans, av. 800 to 1,000 3.00 3.50
Common Texans, av. 800 to 1,000 2.50 3.00
Calves, each 5.00 10.00
HOGS—Good butchers 5.75 7.50
Fair 6.00 6.75
Yorkers 5.75 6.00
Stock average hog 5.00

St. Louis Market.
St. Louis, May 24.
GRAIN—Per bu. Wheat, No. 3 Red \$1.25 1.30
No. 2 1.20 1.25
Corn, New mixed 70 75
Yellow 60 65
White 50 55
Oats, No. 2 mixed 40 45
Barley, choice 1.20
Rye 1.00 1.05

LIVE STOCK.
CATTLE—Native steers, per cwt. \$5.00 6.00
Texas 4.50 5.00
HOGS—Packers, per cwt. 7.25 7.50
Stockers 6.75 6.95

GRANGERS, P. of H.
"OR ANY OTHER MAN"
We would advise you when coming to this city to buy groceries, to call on WHITTON & WEISS. Inquire prices and see the quality of their goods, before buying elsewhere.

JOB PRINTING.
EVERYTHING from a card

SYNOPSIS OF THE STRAY LAW.

How to Post a Stray, the Fees, Fines and Penalties for not Posting.

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

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

No persons, except citizens and householders can take up a stray.

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

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

If such stray is not proven up at the expiration of ten days the taker up shall go before any Justice of the Peace of the township, and take an affidavit, stating that such stray was taken up on his premises, that he did not drive it nor cause it to be driven there, that he has advertised it for ten days, that the master and brand have not been altered, and he shall give a full description of the same, and its cash value. He shall also give a bond to the State in double the value of such stray.

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

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

The owner of any stray may within twelve months from the time of taking up prove the same by evidence before any Justice of the Peace of the township, having first notified the taker up of the time when, and the Justice before whom proof will be offered. The stray shall be delivered to the owner, on the order of the Justice, and upon the payment of all charges and costs.

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

At the end of a year after a stray is taken up, the Justice of the Peace shall issue a summons to the householder to appear and take an affidavit, stating that such stray was taken up on his premises, and if he fails to do so, the taker up shall be allowed to sell the stray, and the proceeds shall be paid to the owner, on the order of the Justice, and upon the payment of all charges and costs.

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

Fees as follows:

To taker up, for each horse, mule, or ass, \$5.00
To County Clerk, for recording each certificate as forwarding to KANSAS FARMER, .35
To KANSAS FARMER for publication as above mentioned for each animal valued at more than \$10.00, .50
Justice of the Peace, for each affidavit of taker up, for making out certificate of Justice, .25
Appraisal and all his services in connection therewith, .40
For certified copy of all proceedings in any one case, .10
The Justice's fees in any one case shall not be greater than, .150
Appraisers shall be allowed no mileage, but for each case, .50

THE STRAY LIST

Strays for the Week ending May 12.

Lyon County—J. S. Craig, Clerk.

PONIES—Taken up by N. H. Kelly, living in Jackson Township, January 15th, 1875, one bay mare, one heavy stallion, with white spot on forehead, supposed to be four years old. Appraised at \$17.00.

For the other, slim built, spot on forehead, supposed to be four years old, branded on right side just behind the shoulder but indistinct. Appraised at \$15.00.

Brown County—H. Isely, Clerk.

COLT—Taken up by Mrs. Margaret Myers, of Hamilton Tp., Nov. 21, 1874, one bay horse, about 15 hands high, in forehead, no marks or brands. Appraised at \$40.00.

FILLY—Taken up by Sol. R. Myers, of Hamilton Tp., Nov. 21, 1874, one sorrel mare, 2 years old, about 14 hands high, in forehead, no marks or brands. Appraised at \$20.00.

DAVIS COUNTY—C. H. Frott, Clerk.

COW—Taken up by Gottlieb Heller, of Jackson Tp., on the 20th of March, 1875, a roan cow, right ear cropped. Appraised at \$15.00.

FILLY—Taken up by Patrick Buckley, of Jackson Tp., on the 24th of November, 1874, a sorrel filly, thirteen hands high, no marks or brands. Appraised at \$25.00.

Douglas County—T. B. Smith, Clerk.

MARE—Taken up by James Gibson, of Endora Tp., April 19, 1875, one sorrel mare, about 15 hands high, in forehead, no marks or brands. Appraised at \$20.00.

Also—Same date, one sorrel mare about 15 hands high, in forehead, no marks or brands. Appraised at \$20.00.

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PRAIRIE DELL FARM.
Stallion Season,

FOR 1875.

EVAN DHU.

Bay Horse; foaled 1870; bred by H. Mix, Towanda, Pa., sired by Rydyk's Hambletonian, dam by Young American Eagle, son of American Eagle, Duroc (791).

The get of this horse can be seen on the farm.

Rydyk's Hambletonian is the sire of Dexter, Jay Gould, James A. Howell, Nettie, etc., etc., and the grand sire of Bodine, Huntress Rosalind, Gloster, Judge Fullerton, Goldsmith Maid, and many others.

ROBERT MACREGOR.

Chestnut Horse; foaled 1871; bred by S. Whitman, Orange County, N. Y. Sired by Major Edsall (record 2:28), dam by Lady Whitman—record in the 5th heat of 2:31—by Seely's American Star, grand dam by Darland's Young Messenger Duroc.

Major Edsall is the sire of Rydyk's Hambletonian—dam by Bishop's Hambletonian son of Imported Messenger Duroc by Sir Archy Duroc by Duroc (791).

Seely's American Star sired the dam of Dexter, Jay Gould, Aberdeen, Nettie, etc., etc.

Macgregor has eight crosses of Messengers through Major Edsall, one through Seely's American Star, and one through Young Messenger Duroc, total Messenger crosses, ten, limited to 30 mares including my own.

TERMS—\$50.00 the season—season ends July 15th. Turnable from the next season—season ends July 15th.

Pasturage with running water, box stalls, etc., furnished on reasonable terms, the best of care given, but all accidents except those arising from the removal of the stock.

JOHN DRBW, Supt. R. I. LEE, Topeka, Kansas.

TO BREEDERS OF FINE HORSES.

During the Stallion season of 1875, the fine bred Stallion Billy Stanger, will make the season at the place herein named.

BILLY STANGER.

A Beautiful bay Stallion, 15 hands 8 inches, high is very fast, his style and fine action, together with his unbroken pedigree, render his stock very desirable.

PEDIGREE—American Stud Book.

BILLY STANGER was got by Stanger out of a black Southern mare, Cherry Blossom, by imported Lenoir; he by Lenoir by Whelp Lane, full brother of Ariel, by American Eclipse, a sorrel horse, by Duroc; dam by Miller's Damsel by Messenger Whip.

Imported, brown horse, 15 hands 3 inches high, etc. Billy Stanger will make the season three miles south of Rossville, south of the Kaw river. Mares will be well provided for and receive the best of care, but all accidents will be at the owner's risk. Owners from abroad, or vicinity, can apply at the farm, or by mail at Rosville, Shawnee county, Kansas.

E. V. HOLMSEN.

\$50 Reward.

Strayed or stolen from the subscriber, living in Silver Lake township, Shawnee county, on or about August 1st, 1874. One light bay filly 2 years old past, near 15 hands high, hind foot white, white spots on her face, light spot on right side of lower lip. This animal shows marks of good blood. The above reward will be given for the return of the animal, or any information that will lead to her recovery.

M. M. STANLEY, Kingville, Kansas.

Bro. Stanley asks of the Granges of the State to have this read in the Grange.

VEGETABLE PLANTS

The largest quantity, best quality, greatest variety of plants in the West. Cabbages, Cauliflowers, Lettuce, Tomatoes, Pepper, Egg Plants, Sweet Potato, Celery, Tobacco, Horse Radish, etc. Price list and circulars sent.

ATKINS & WINGERT, E. 18th Street, Kansas City, Mo.

Nurserymen's Directory.

J. JENKINS, Grape and Seedling Nursery, Box 45, Winona, Col., Co. Ohio, Specialties—Forest tree seedlings and trees, Evergreens, Concord Grape Vines, etc., etc. Catalogue sent.

A. PLEBEED—Prime, fresh Apple Seed for sale at low rates. Address H. W. BLANCHARD, Homer, N. Y.

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Bake better; burn less fuel; give better satisfaction, and are the standard Stoves of the day.

Extension Top Stoves, with High or Low Down Reservoir.

EVERY STOVE WARRANTED.

BUCK'S Guarantee,

For Coal or Wood, are the only Soft Coal Cooking Stoves that always give perfect satisfaction. They Bake, Broil and Roast equal to any Wood Stove; are fitted with our Patent Chilled Iron Linings, which last as long as any five sets of ordinary linings. Their operation is perfect.

Extension Top, with High or Low Down Reservoir, also manufacture Enamelled Work of all kinds, Culinary and Plumber's Goods &c.

Buck & Wright, 720 and 722 Main Street, St. Louis, Mo. Manufacturers of varieties of Cooking and Heating Stoves. Sample Cards and Price Lists furnished on application.

Our readers, in reply to advertisements, in the Farmer will do us a favor if they will state in their letters to advertisers.

Breeders' Directory.

BYRON BREWER, Glenn, Johnson county, Kansas, Breeder of Poland-China Swine. Pigs, and all kinds of stock, and warranted first-class. Correspondence solicited.

J. M. GAYLORD, Paola, Kansas, Breeder of Buff and Blue and Partridge Cochins, Dark and Light Brahmas, Houdans. Eggs, \$1.50 per dozen. Chicks for sale, after Aug. 1.

T. L. MILLER, Beecher, Illinois, Breeder and Importer of FINEST HARTLEY and Cotswold Sheep. Correspondence Solicited.

KERR, TAYLOR & CO., Commission Dealers in Cattle, Hogs and Sheep, F. O. address, Buffalo, New York. All stock consigned to our care will receive prompt attention.

WM. S. TILTON, Togus, Maine, Breeder of Holstein and Jersey Cattle, Cotswold Sheep, and driving horses of fashionable blood.

THEODORE BATES, Wellington, Lafayette county, Mo., (mail road station Lexington) breeder of pure Short-Horn Cattle; also Cotswold and Southdown sheep. Stock for sale.

J. DUNLAP, Meadow Lawn, near Galeburg, Ill. Breeder, (not dealer) Short-Horn Cattle, Choice young bulls for sale. Send for Catalogue.

THOS. SMITH, Creston, Ogle County, Illinois, breeder of Short-Horn Cattle and Cotswold Sheep. Has choice young bulls for sale.

G. G. MAXON, "Silverdale Farm," Schenectady, N. Y., Stock for sale.

THOMAS KIRK, Washington, O. H., breeder of Short-Horn Cattle of the most fashionable families. Stock for sale.

H. N. MOORE, "Bona Valley Place," Red Oak, Iowa, breeder of Short-Horn Cattle, Berkshire and Magic Hogs. None but thoroughbreds kept on the farm.

W. G. GODDARD, Harrodsburg, Ky., breeder of pure bred Short-Horn Cattle of unfaded pedigree—exporters of the sort suitable for the show ring and shambles.

M. H. COCHRANE, Hillsboro, Compton, Ont. Canada, breeder of Short-Horn and Ayrshire Cattle and Shropshire Sheep. Catalogues sent on application.

GEO. E. WARING, Jr., "Ogden Farm," New York, N. Y., breeder of pure Short-Horn Cattle. Stock for sale by W. B. Casey, agent for Ogden Farm, Mt. Vernon, Ill.

GEO. H. PHILLIPS, Lebanon, Ky., breeder of improved English Berkshire swine and Short-Horn cattle, for sale at fair prices. Send for circular.

ANDREW WILSON, Kingville, Kan., breeder of Thorpe-bred Short-Horn Cattle. Stock for sale. Correspondence solicited.

THEODORE EADS, "Mapledale," Corning, Adams Co., Iowa, breeder of Short-Horn cattle, Berkshire hogs, and all kinds of stock. Catalogue sent on application.

THOS. E. TALBOT, Daltow, St. Charles Co., Missouri, breeder of pure Short-Horn Cattle. Catalogue sent on application. Price low. Correspondence solicited.

W. M. BLACK, "Cornwell Farm," Carrollton, Greene Co., Ill., breeder of Short-Horn Cattle. Choice young bulls and heifers for sale at reasonable prices.

MILTON BRIGGS, Kellogg, Jasper Co., Iowa, breeder of Short-Horn Cattle, and Berkshire Swine. Stock for sale.

L. BURRUS & SON, "Locust Lawn Farm," Carrollton, Ill., breeders of Short-Horn Cattle. Stock for sale at farmers' prices. Correspondence solicited.

PERKIN DUCKS and BROCK'S TURKEYS.—The pick of the flock for 1874. Order now. Rosen Ducks, Buff and Partridge Cochins, Light and Dark Brahmas, Java Games. Address W. C. LEFF, Mystic Bridge, Conn.

THE FINEST LOT OF POLAND CHINA and BERKSHIRE Pigs, also Short-Horn Durham Calves constantly on hand, for sale at the dairy farm of R. R. Saffold, one mile east of Winfield, Cowley Co., Kansas.

AGERS, Geary City, Doniphan Co., Kansas, Importer and Breeder of Game Fowls. Games bred for the pit a specialty. Also can furnish all the leading strains of land and water fowls and fancy pigeons.

Seedsman's Directory.

JOHN KERN, SEEDSMAN, 211 Market street, St. Louis, Mo. Illustrated Catalogue Free. Correspondence Solicited.

PLANT SEED COMPANY.—Established 1848—Incorporated 1872. St. Louis, Mo. Importers and Growers of reliable Seeds. Illustrated Catalogue free to all applicants.

Sweet Potatoes!

I have for sale Red and Yellow Nansemond and Early Bahamas Potatoes, and will have plants in their season. D. G. WATT, Lawrence, Kansas.

BLOOMINGTON NURSERY, Bloomington, Ill.—Four catalogues post free for twenty cents.

GREAT JOINT PUBLIC SALE
JUNE 15, 1875.

Short-Horn Cattle,

135 Head Thoroughbred Registered Cattle.

Noted Bulls; Grand Airdrie 3299, S. H. R. Baron Sheffelder 13200, Counter-part 24 12730, Imported.

55 HEAD HEIFERS 3 CALVES.

BALANCE COWS AND BULLS.

Nokomis is on the Indianapolis & St. Louis R. R. 13 miles west of Paris, the crossing of the Illinois Central R. R., and 25 miles east of Litchfield, the crossing of the Toledo, Wabash & Western R. R.

A credit of six months will be given on approved note. Six per cent. interest, or five per cent. off for cash.

Catalogues ready early in May on application, or day of sale. JOHN H. BEATTY, JOS. F. SCOTT.

Wholesale Grange Supply House.

JOHN A. WEST, Successor to DICKINSON & Co., Has Removed to 213 West Madison Chicago.

DRY GOODS, BOOTS AND SHOES, CLOTHING, HATS, CAPS, And General Merchandise.

GRANGES, FARMERS' CLUBS, AND ALL CONSUMERS supplied in any desired quantities. Catalogues of prices for spring and summer trade containing full information regarding my manner of doing business will be sent free on application to any address.

All orders promptly and carefully filled 25 to 50 per cent less than retailer's prices.

Taylor's Commercial NURSERIES OF

LAWRENCE } KANSAS

Offers for the spring trade of 1875 a full and complete assortment of general nursery stock, of unsurpassed quality, and at lowest cash rates.

My stock of Apples, Peaches, Plums and Quinces, together with a full and general assortment of small fruits is complete, and in quality fully equal to the standard of former years.

Parties desiring to buy for cash, will find it to their advantage to correspond with me, before purchasing. C. H. TAYLOR, Lawrence, Kansas.

EGGS FOR HATCHING.

I will sell at the uniform price of \$3 per setting of thirteen eggs from the following varieties of pure bred and standard poultry: Light and Dark Brahmas, Buff Cochins, White Leghorns and Aylesbury Ducks. My stock is warranted pure, and from the best strains in the country. Young stock for sale in September in the country. Young stock for sale in September in the country. J. DONOVAN, Fairmount, Leavenworth County, Kansas.

TEAM FOR SALE!

Or to Exchange for City Property.

TO FARMERS OR TEAMSTERS.

A number one Span of Horses and Wagon. The Horses have done no work, since last October; have been well fed, and stabled, and are in number one working order; they are perfectly trustworthy, in any place; also one of them is a good Suggy Horse. Any one wishing to purchase, call at 210 Kansas Avenue, they will be sold reasonable, or address Mrs. E. C. METCALF, Topeka, Kansas.

SHEEP.

50 head of sheep for sale. Address CHARLES MOXLEY, Madison, Greenwood Co., Kan.

Jersey Bulls For Sale.

One five years old, the other two years old, both registered in Herd Book. For a cheap sale, apply to CHARLES KEARNEY, Watena, Kansas.

Beekeeper's Directory.

BES, QUEENS, HIVES, HONEY EXTRACTORS AND TO NOAH CAMERON, LAWRENCE, KANSAS.

ATTENTION, OWNERS OF HORSES.

Ask your Harness Maker for the KING COLLEGE P.A.B. They are warranted to cure any sore neck on horse or mule, or money refunded. Printed directions are followed. Send for sample. The Collins & Co., Sole Manufacturers, Buchanan, Mo.

W. R. MOFFATT, PAWPAW GROVE, Lee Co. Ill., Importers and breeders of pure-bred Clydesdale horses, Short-horn cattle, Cotswold sheep and Berkshire pigs.

BEST AND SEEDS IN AMERICA OR

Cheapest and Money Refunded

Buy direct from growers cheaper than dirt. Can be the world on prices, quality, reliable, fresh, genuine seeds, true to name. A nice illustrated Floral & Garden Guide free. Wholesale list for Seedsmen free. R. H. SHUMWAY, Rockford Ill.

ECONOMY IN CORN CULTIVATION

Canvasers wanted where we have no Agents. SEND FOR CIRCULARS.

THOMAS SMOOTHING HARROW

ADDRESS ALL ORDERS TO W. H. BANKS & CO., FARM MACHINERY AND SEEDS, HARDWARE SPECIALTIES, 24 & 26 SOUTH CANAL ST., CHICAGO.

G. W. MARTIN,

SUCCESSOR TO F. H. TIERNAN,

BLANK BOOK MANUFACTURER.

Job Printer,

General Binder, Kansas Avenue, bet. 8th and 9th TOPEKA, KANSAS.

THE MOST DURABLE AND ELEGANT BLANK BOOK WORK AND GENERAL BINDING EVER TURNED OUT IN KANSAS.

Magazines, Music and Law Books Neatly Bound.

Railroad, Merchant and Bank Printing and Binding of all kinds, Superbly Done.

I shall endeavor to maintain the reputation of this establishment for perfect workmanship and fair dealing.

GEO. W. MARTIN.

\$100,000.00

To Loan at REAL ESTATE BANKING HOUSE

J. P. ENNIS & COMPANY, 142 Kansas Avenue, Topeka, Kansas.

Upon improved farms situated in Eastern Kansas, in sums of \$500.00 and upward. Applicants should write full description of property offered as security, and be sure their title is perfect for record. Also state length of time loan is wanted and for what purpose, whether to relieve existing mortgage or for investment. We also have on hand millions of acres of choice farming land for sale at low prices. Prompt attention given to collections of all kinds.

MONEY TO LOAN!

GAVITT & SCOTT, TOPEKA, KANSAS.

MONEY always on hand for Loans in amounts of \$500 to \$10,000, from one to five years, on first mortgage upon farms and good city property in the Eastern part of Kansas.

Parties writing to us will save time and expense by sending an accurate description of their property. If farm, give number of acres, amount fenced and cultivated, amount of orchard. State whether bottom or prairie land. Describe the buildings, and give the present cash value of the property.

Enclose stamp for answer. Address, GAVITT & SCOTT, Topeka, Kansas.

Kansas Loan and Trust Co. TOPEKA, KANSAS.

CAPITAL, - - \$100,000.

