

## FOR FARMERS AND GARDENERS.

## Southern Tour of Agent Little.

We have before us a letter addressed to Bishop E. Hunter, president of the D. A. and M. Society, from which we learn that, during a recent tour through a portion of Utah county, the agent of that society, Mr. James A. Little, accompanied by Mr. C. H. Oliphant, a meeting was held at Lehi, at which were offered suggestions useful to all engaged in home manufacturing and agricultural pursuits. The claims of the society were also presented. They saw, at Lehi, a bin of very bright, clean wheat, raised by Mr. Goats, of that place. To securely prevent smut, Mr. Goats washed his seed and rolled it in lime, in which condition, on account of the weather, it lay some ten days before sowing. The result was, he had a crop of wheat, instead of smut. It is believed that seed wheat, treated in this way, should lay three or four days before sowing, to let the lime operate upon the wheat.

At Lake city a meeting was also held, where a lively feeling was manifested relative to improvement in agriculture and the success of home manufactures.

A pig, 9 months old, was exhibited there, the unusual size of which suggested that there was room for the introduction of far superior breeds than those now propagated among us.

A meeting was held at Pleasant Grove, where, also, an interest was awakened.

At Provo they attended a meeting of the Utah Branch Agricultural and Manufacturing Society. On the following evening they held a meeting. The brethren at Provo are wide awake to every thing that tends to develop the resources of our mountain Territory.

A meeting was also held at Springville, where considerable had already been done by Agent C. H. Wheelock.

They proceeded and, in the evening, held a meeting at Spanish Fork, which they represent as not behind any other settlement in their zeal for home interest.

There is a disposition among the farmers generally to adopt a more thorough practice, hereafter;—also to enter more extensively into the growing of carrots, sugar beets, rutabagas, &c., for winter feed of stock; also, more generally to save and apply their manures.

Fruit culture is beginning to attract due attention, with some of the brethren south. There is no question with us that they will be able to exceed even their most sanguine expectations, if they will set out the trees and properly attend to them after they are set out.

At Springville, about 250 acres have been set apart for the culture of sorghum sucre. This is commendable. They will doubtless secure an abundance of excellent syrup; but should any, as hinted, wish to experiment in sugar-making, it will be necessary to plant the seed as early as your early corn, that it may fully mature, without which it will not grain.

**STRAWBERRIES.**—This delicious fruit has been cultivated with encouraging success in this Territory, yet not so generally as we could wish, for a fruit so rich and so easily obtained. August is the month usually preferred for transplanting, the ground having been well spaded previously, in May or June, and again before transplanting. But it is now spring, and, if there be any who have a spare space which they would like to devote to the strawberry, let them obtain some good plants and set them out.

Now, then, having secured the plants, how are they to be treated to render them most prolific? On this we will make a few suggestions, taking it for granted that due attention has been given to the preparation of the soil, which should be moderately rich, and mellow.

Set out your plants in rows three feet apart, the plants in each row fifteen inches apart. By observing these distances, the bed can be kept clean with the hoe. By cutting off the runners once or twice you will have no further trouble with them during the season and the fruit will be of larger size, more easily gathered and the crowns of the plants for the next year's bearing will be increased and strengthened, which will cause them to form large bunches of flowers, and the fruit will be much larger than if cultivated in an ordinary or indifferent way.

As soon as the weather becomes hot and your plants have attained a more healthy growth mulch, or sprinkle the beds, or rows, with a good coating of saw dust, spent tan-bark, shavings, wood ashes, decaying chips from the wood-yard, straw or any light substances, to keep the surface moist, sustain and invigorate the plants, and, where short-stemmed varieties are cultivated, the

berries, when ripe, are clean and do not become half covered in the soil.

There is some diversity of opinion as to manuring the soil for the strawberry. One amateur says:—"The ground for strawberries ought to be well prepared before planting, by trenching or subsoiling 15 or 18 inches deep and mixing plenty of stable or yard manure with the soil when performing the operation." Another says his "largest and finest crops of the strawberry are grown on land without any manure, and where no manure has ever been applied."

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Manure highly, and you get rank, rampant vines, and but little fruit."

However, we will venture that more depends on the adaptation of soil and judicious but limited manuring, though the efficacy of mulching is universally acknowledged and, in this country, probably, for trees and all perennial plants, is the best.

Dr. G. W. Russell, of Hartford, Conn., of the Wilson's Albany seedling, raised, between June 17 and July 10, last year, from a plat 18 by 20 feet, the enormous quantity of seventy-four quarts, besides those decayed in wet weather, estimated at about twelve quarts. In one day, without close picking, the plat yielded twelve quarts.

It will be found beneficial to mulch the ground between the rows with green grass or straw, to prevent that portion of the bed used as a path from becoming too hard.

In November, cover the ground between the rows, mulching again as above, and cover the bed with horse manure and litter, taking care not to bury the plants. If in the spring any of them do not readily appear, the muck should be pushed aside; but the manure and litter are to remain on the bed.

**THE TEA PLANT.**—Tea was first introduced into Russia, from China, in 1653. Since that period the demand has increased till it has become a staple article of commerce.

There are varieties of the plant, but they may not be distinguished by the color of the leaves. Black and green tea are from the same tree—the black being produced from the old leaves, the green from the young.

The plant grows from two to four feet high, with a bushy top. The leaves are cut when the plant is three years old—each tree yielding about three ounces of dry tea.

Its culture is said to be quite simple. The seed is planted about three feet apart, four or five in a hill. After the lapse of ten or twelve weeks, the germ shoots from the ground, after which its growth is very rapid. Two or three of the strongest shoots are allowed to remain—the weaker ones, if any, are pulled up. If protected from severe winds, it will grow on barren, stony soil.

Will it grow in Utah? Who has tried it and can inform us of their success?

**CHINESE SUGAR CANE.**—These of our farmers who design cultivating the cane in large patches would do well, perhaps, to plant the seed in hills three feet by two apart, dropping eight or ten seeds in a hill and, at the first hoeing, reduce each hill to six stalks.

See to it, however, that neither broom corn, Dourah corn, nor chocolate corn are within half a mile of your cane field, for, if mixed with any of these varieties, your seed will be rendered unfit for planting and the cane juice deteriorated both in quantity and quality. Plant about the time of planting for your corn crop, and spare no labor in procuring the best seed.

**HEN MANURE.**—Those who have hens—and he who has not, should have—but be sure and keep them from injuring the gardens of your neighbors—may obtain, by a little care, a manure in no respect inferior to the best Peruvian guano from the droppings of their hen roosts. Cover the ground under the roost with old muck or common soil and, as the droppings accumulate, gather them into a barrel, where it can be kept dry. It is said that forty bushels of this will manure an acre. A single handful is sufficient for a hill of corn.

**OATS—WHEN TO SOW.**—As a general rule, there is no time to sow oats so good as just as soon as the frost is out of the ground so that plowing can be done; and if the land is not naturally dry, or has been under-drained, so as to plow very early in the spring, it should be plowed in the fall with a Michigan plow, and then it can be harrowed or scarified with a cultivator, and sown and lightly dragged. And it is even better to sow without any stirring of the soil previously, if it is very soft, rather than to "wait for a good time." The year 1858 will be long remembered as one of unusual wetness in the spring, and one of failure of the oat crop. Yet, in every instance, where the seed was put into the ground early, where it had been previously prepared, or where it had been under-drained, the crop was good, both in straw and berry.

## "A Little Farm well Tilled."

We commend the following sensible article, from the *Genesee Farmer*, to the careful consideration of our farming community. The evils therein spoken of as existing among the farmers of Western New York are by far too prevalent here:—

## HOW FARMERS LOSE MONEY.

Farming without profit is a money losing business. Farming neglectful of practices known to ensure large crops, is a money wasting business. Farming with mistaken ideas of economy, saves cents to throw away dimes—saves a few days' work and gets but half what the soil would give with better treatment. Let us give a few illustrations. To begin with a minor instance, farmers lose money by neglecting to study the

## ADAPTATION OF CROPS TO SOILS.

It is well known that almost every crop and product succeeds best in some one kind of soil, and that these preferences vary as widely as soils vary. One kind of soil is a corn soil, another a wheat soil, another suits rye. Let us try, then, to so plan our operations as to give each crop the soil which suits it. Farmers lose money by neglect of the maxim that

## ALL SOILS MUST BE MANURED,

Before they can be productive of valuable crops. To grow, a plant must receive suitable food—it can be starved as readily as man or beast; and yet, how much of the unprofitable farming to be seen results from attempting to grow crops on worn or poor soils without manure. The corn crop, for instance, is a comparative failure on all but good soils, from want of food to thrive upon—from lack of abundant and ready prepared nutrient to hasten its growth, so that it may reach maturity in season. An acre of land, of suitable soil, rich, deeply tilled, planted in good season and thoroughly and cleanly cultivated, will produce more corn than five acres, poor, skin-tilled late-planted and half-cultivated, and at perhaps one half the expense of the latter. The question of deep or skin-plowing needs further illustration. An acknowledged requisite of large productiveness is

## A DEEP AND MELLOW SOIL.

A large hill of corn, a thrifty growth of wheat, grass, oats, or barley, must have roots and root-lets equally thrifty, and such only grow in a deep, mellow soil. With plenty of room and food for the roots, the whole plant will correspond; with a shallow or cloddy soil, the roots are only adequate to a small growth above ground—they can neither find nor carry up the nourishment requisite to a large product. It may be said that some soils are already too light and mellow; but such are rare. Farmers, again, lose money by

## UNSEASONABLE SEEDING:

And also by imperfect seed—by sowing and planting when only a remarkable season can produce a favorable result. Spring grains are sown when, in the usual course of nature, the summer drouth must injure them seriously; corn is planted when frost is most likely to find it 'in the milk'; wheat is gotten in too late to withstand the winter and just in time for the midge—the farmer taking a risk no insurance company would venture upon, without the highest premium.

## CLEAN CULTURE

Is an acknowledged necessity of profitable farming. Is it a matter of small importance to a growing plant, whether it has the field to itself, or whether weeds surround it and rob it of a portion of the nourishment supplied by the soil? Experience teaches that it is not. Observation will show us that we can not feed a vagabond with the bread which belongs to our faithful servants, unless they go hungry for the same. Lastly (for this time at least), farmers lose money by not heeding the injunction,

## "DON'T ATTEMPT TOO MUCH:"

That is, more than they can carry out thoroughly and systematically. Don't let us attempt to grow cat-tail flags on good corn soil—to raise a "premium crop" of any kind on an exhausted soil, without manure—to feed plants with brick-bats and inert subsoil—to plant when we should be hoeing—or to raise grain and weeds at the same time, expecting both to flourish; but attempt only what we can give due preparation, manure, time, and culture; and the number of ways (they seem almost innumerable) in which "farmers lose money" will be slightly less.

## Preventing Smut in Wheat.

Morton, in his "Cyclopedia of Agriculture," a recent English publication, says:—

"The old agricultural pharmacopoeia gave chamber-lye and caustic lime as the grand recipe for the destruction of the black-ball, and sometimes washing with salt and water was recommended. Both plans might mitigate the evil, but neither of them ever prevented it. Fortunately, sulphate of copper (blue-stone, or blue vitrol) was thought of, and there can be but one opinion as to the perfect efficacy, when properly applied." The quantity generally used in pickling new wheat is 1½ pounds of blue-stone, dissolved in 2 gallons of hot water, which is sufficient to prepare 8 bushels, the liquid being allowed to cool before sprinkling it on the wheat. There is little risk of injuring the seed by an overdose, as half a pound of blue-stone has been applied to a bushel without injury to the seed. Old wheat can also be pickled with perfect safety with blue-stone—a thing that never can be done without great danger, when chamber-lye, or salt and water and lime, are employed. The quantity of blue-stone for old dry wheat never need exceed 1½ pounds to each 8 bushels, but 2½ or 3 gallons of water are necessary for saturating the seed.

The mode of pickling wheat with blue-stone is exceedingly simple, and this of itself is a great recommendation in its favor, even although it

were not more efficacious than the older methods of pickling; but, when simplicity and efficacy are united, there is no excuse for any farmer who may still obstinately stick to imperfect and obsolete practices. All that is necessary, in pickling with blue-stone, is to dissolve it in hot water in the proportions before stated; then spread out the wheat about 6 inches thick, on a stone floor, sprinkle the pickle equally over it, and mix thoroughly with shovels until the wheat has acquired a uniform degree of dampness. It will be ready for sowing in the course of two or three hours, but it is better to have the pickling done a day before sowing. Many farmers pickle the whole of their seed wheat at once, and let it lie for years before sowing, not only without injury, but with evident advantage; the blue-stone thus appearing to possess the power of defending the germ against atmospheric influences, while, at the same time, rats and mice will not touch wheat so pickled, unless greatly pinched for food.—[Pat. Office Report, 1855.]

Blue-stone, we are informed, can be obtained at the store of E. D. Woolley & Co.

[From Am. Agriculturist, Feb., 1859.]

## STOCK IMPROVEMENT—BREEDING IN-AND-IN.

In the *Ohio Farmer*, of November 27, last, I find the following from the pen of Hon. Cassius M. Clay, of Kentucky:

"Breeding in-and-in; that is to say, breeding to dam or sire, or near of kin, has been too fully discussed by some of the most intelligent men in this country and England for further argument. Its advantages are: 1st. It reduces the bone, and gives, to a certain extent, more fineness and symmetry. 2nd. It produces a tendency to earlier maturity. 3rd. It suits an indolent breeder—he gets at home what others go far to seek; he chooses once for all, while others make a yearly choice through life! 4th. It is urged as the natural order.

"Its disadvantages are: 1st. It produces idiocy, blindness, want of constitution, disease, and impotency! 2nd. It takes away all the advantages of a wide and wise selection of superior animals. 3rd. It is practiced now and always by that large class of mankind who never have, and never will, produce anything memorable. 4th. It falsely bases all 'improvement' upon feeding and shelter, ignoring selection of superior points. 5th. It is not the natural order as alleged. In a state of nature the feeble creatures of 'in-and-in' breeding are driven off and killed by the superior types from all sources.

"When a man attempts to keep up 'in-and-in' breeding he violates this great law of selection; and nature closes his false practice by impotency, disease, and death. From all which, I conclude the rule—never breed 'in-and-in' when you can get an equal animal of the same race, or breed, family."

To the above I must dissent, and, if the writer will permit a humble New York farmer to do so, I will take an opposite side. Mr. Clay is a gentleman, a statesman, a philanthropist, a farmer—four of the noblest qualifications which can be accorded to any man. He is, withal, a capital stock breeder, and on his magnificent fifteen hundred or two thousand-acre blue-grass farm, in Central Kentucky, there is a splendid collection of short-horn cattle, of sheep and of pigs—all of the best. When he discourses upon any topic, I hear, or read him with great respect and attention, as I do now; but thinking him exceedingly twisted on that of "in-and-in breeding," I beg the use of your columns, Mr. Editor, to express, most respectfully to him, my own opinions in the matter.

What is "in-and-in" breeding, as usually understood by breeders of "improved stock"—for I take it, that those who only breed "common things" either know or care precious little about it, so that they only obtain the procreation of their beasts in any cheap and convenient way? As I have been taught, all the great and marked improvements which have been made during the past century by the most distinguished stock improvers in England, whether of horses, cattle, sheep, pigs, or poultry, and the perfection to which they have brought their animals, has been by a series of the most persistent course of coupling sire to daughter, son to dam, brother to sister, and any, and all other collateral relationships in which the particular qualities they desired to transmit in the offspring of their breeding animals predominated.

Take the "Stud Book," containing the pedigrees of the most celebrated "blood" horses on record, and you will find those of marked celebrity on the turf and in breeding, were frequently bred from the closest affinities in both size and dam, even down to a late day.

Bakewell—who is quoted by all as one of the greatest stock improvers of the last century, in the draught-horse, long-horned cattle, and long-wooled sheep—bred in-and-in without scruple, and to the closest connections, and persisted in it until in each of those varieties of stock he effected his purposes. He had a design, of course, and knowing what he was about, and how to use his material, continued it so long as was necessary. His cattle, to be sure, from being of the wrong breed, although perfected in that breed, were superseded by other breeds; but his horses and his sheep, as he left them, now stand as models for every good breeder in England, and have so stood since his time.

Bakewell, in the outset of his career, saw the imperfection of the breeds which he wanted to improve, and in starting, availed himself of the labors of the "improvers" before him, such as they were, and obtained the best stock from them that he could, and then worked upon them for two score years, at least, until all the fine stock-breeders of England, who bred his kinds of animals, had either purchased of him at high prices,