FOR FARMERS AND GARDENERS.

RAISING MELONS, CUCUMBERS, &c.—The lateness of the season has retarded the vigorous growth, if not, in many instances, the germination of melons and cucumbers, as also other of the more tender varieties. Many, we presume, have not yet planted, which, perhaps, in view of the coldness and lateness of the season, especially in cold soils, will not be any serious detriment to the raising of good and seasonable fruit. A friend, who, we believe, is generally eminently successful in this department, has for years adopted the practice of planting his melon and cucumber seeds about the first of June, in the open air, when the ground is generally warm and the weather settled, so as to induce a healthy, vigorous and rapid growth.

However, those who can conveniently adopt the plan of starting their seeds in rude, open willow baskets or in pieces of turf, will be more sure of earlier fruit.

The following, from the *American Agriculturist*, will be appreciated by all who are in any degree interested:

Most persons relish fine ripe melons, especially in the hot summer months, when there is a craving for something succulent and cooling. Melons are one of the bountiful gifts granted by nature, alike to poor and rich, for the laborer who has a little plot around his cottage, can grow them for his own use, as well as can the millionaire with his garden and conservatories. A few seeds, a plot of ground naturally free from standing water, or made so artificially, and plenty of sunshine, are the essentials. A deep, pliable loam, having more sand than clay, and enriched with decayed vegetable matter, is the best.

Early starting of the vines is also very desirable. In this latitude we have raised very good melons from seed planted near the close of May, but they came to full maturity after the season when they would have been most relished. May 1st or earlier is the better season for starting the seed. As there is danger of seeds rotting in the ground, and also of the plants being stunted by cold, when put into the open ground at the north before about the middle of May, we advise starting the plants in sods or baskets as soon as the middle of April, or first of May. Cut pieces of grass turf, say six inches square, more or less, invert them, and plant four to eight seeds in each. Keep the turf barely moist, but never dry, placing it in a cellar, or on the south side of a house, board fence, or other protection. When the seeds are up, the ground warm, and the weather suitable, transfer the sods to hills, or the seeds may be planted at first in open baskets filled with earth, and the baskets afterwards be set in the garden or plot. The roots will find their way thro' the holes in the bottom and sides of the basket, and out into the surrounding soil. The baskets, of course, are to be left in the soil undisturbed through the season. Both of these plans have proved very good, and again two or three weeks time may thus be made.

Whether the seeds be previously started, or planted at once in the open ground, the hills should be made wide apart, say six to eight feet each way, for water melons, and five to six feet for musk melons, canteloupes, cucumbers, etc. There is no waste of ground in this. If land is scarce or valuable, the spaces between the hills, but not very near them, may be used for early lettuce, radishes, or other early, low growing plants. Melon vines grow better, and yield more and better fruit for not being crowded.

The finest plot of cucumbers we ever saw, was in this wise: they were planted in DRILLS six feet apart, the seeds being sown quite thickly, and afterwerds thined out to about fifteen inches between the plants. The thinning was done from time to time by clipping down, not pulling up, the excess of vines. The last plants were not cut out until there was an established growth of two or three feet, and all danger from insects was past. After this, by trimming in the ends of the runners, and occasionally clipping them where there was an excess, they were made to cover evenly, but not thickly, a space of two and a half feet each side of the original seed drill. This left them in beds five feet wide, with a clean path one foot wide between each bed. From this path the picker or weeder could reach into the center of the bed on each side, and the vines were uninjured by trampling in weeding or gathering the cucumbers. A similar plan would be a good one for all sorts of melon vines. We shall adopt it this year.

For fertilizers, well rotted barn-yard manure, or chip manure, rotten leaves (leaf-mold), sand on clay soils, bone sawings, etc., are good. Let a free supply be added to each hill, or along each drill, digging the ground thoroughly for a foot each way from where a plant is to stand, and at least a foot deep, mixing in the manure to that depth and width.

Deep digging is important. The vines require much moisture, and they should have a chance to send down roots below the drying effects of the severest drouth, that they may always obtain a full supply of sap.

Insects are the greatest obstacle to success in raising melons or cucumbers. They may be kept off with frames, hoops, or bottomless boxes, placed over the hills. Soot, ashes, air-slaked lime, red pepper, tobacco water, etc., sprinkled over the young plants, are sometimes partial preventives, but not always. The best plan we have found in practice is to raise enough plants extra to feed the insects. This may be done in two or three modes. Our plan is to put in twenty, thirty, or even fifty seeds for each perfect plant finally wanted. Out of this number we have never failed to get some perfect plants. This is only practicable when seed is abundant, but it is better usually to buy two or three five-penny papers of seed extra, in order to secure a certain supply of plants. A second plan is, to put in two or three circles or rows of seeds, each row being planted three-fourths of an inch deeper than the one within it. By this means a fresh supply of tender plants will appear in succession, and the insects will feed upon the youngest, and before these are consumed, the first starting plants will have grown out of the way of harm, as the insects do not eat the leaves after they are somewhat matured and hardened.

The third plan is similar, and we have found it perfectly effectual. We make the hills or drills, and plant a few seeds, say 2 or 3 inches deep, then put on three-fourths of an inch of fine earth, and add another layer of seeds. Then add more earth and more seeds, the last seeds being covered but 1-3 to 1-2 inch with fine soil, slightly patted down to prevent drying. We have also varied this plan by scattering the seeds on the surface of the prepared hill, and dibbling, digging, or raking them in to different depths. They then continue coming up for three or four weeks, and the insects invariably leave us some strong plants among those first starting. This takes more seeds, and may seem a lazy method, but for busy men who have not time to stand by and watch the enemy, and pinch them off with the fingers, or "shoot them with bow and arrow," we think the plan will in the end prove the cheapest. Twenty five cents worth of extra seed will satisfy the insect tax-gatherers, and we usually prefer to pay the tax rather than expend a dozen "quarters" worth of time in protecting and defending our "reserved rights."

The American Agriculturist for May is before us, containing its usual rich variety of original matter. The "Calendar of operations for May" is very complete, embracing directions for the farm, the orchard and nursery, the kitchen and fruit garden, the flower garden and lawn, the green and hot houses and the apiary, or treatment of bees.

The farming season has not been so early in the States as usual, on account of the heavy April rains.

Every farmer and gardener in Utah should have a copy of this standard agricultural journal. It is a "thorough going, reliable and practical journal, devoted to the different departments of soil culture—such as growing field crops, orchard and garden fruits, garden vegetables and flowers; trees, plants and flowers for the lawn or yard; in-door and out-door work around the dwelling; care of domestic animals, &c., &c."

The information contained in the *Agriculturist* is of a general and most practical character—"confined to no state or territory, but adapted to the wants of all sections of the country."

Though it is our design to permanently devote a portion of the *Deseret News* to the interests of the farmer and gardener, there are many matters treated of in the *Agriculturist*, which are of great importance to those who cultivate the soil, raise stock, &c., which our space will not admit. Therefore, we would like to see a copy of the *American Agriculturist* in the hands of every man in our Territory who cultivates the soil—and who does not?

Specimen copies may be seen at this office. Each number contains thirty two quarto pages, stitched. The type is good and the whole mechanical execution is without fault.

Price, $1 per annum. Subscriptions will be received and, if so desired, subscribers in this city and vicinity, may obtain their papers, at this office, as they arrive from the East.

This we are willing to do for the accommodation and benefit of all who desire practical information relative to the "most useful and the most noble employment of man."

The Genesee Farmer for April arrived per last California mail. Why this journal should be a month or two behind time, is to us unknown.

The number before us, however, contains much useful matter. The article on "Crops which enrich the Soil" is quite apropos, particularly in those eastern localities where the soil is so nearly exhausted. For the benefit of the Utah farmer we will give a single extract:

One of the great needs of American agriculture is the introduction and extensive cultivation of such plants as enrich rather than impoverish the soil. So far as ascertained, the leguminous plants—such as peas, beans, and clover—belong to this class. So also do turnips and probably other cruciferous plants, when not raised for seed. On the other hand, the cerelia—including wheat, barley, oats, rye, maise, sugar cane, and the grasses proper, such as timothy, red-top, rye-grass, etc.,—impoverish the soil. They all have starchy seeds and glassy stems. They take from the soil, from rains, dews, and the atmosphere, more ammonia than they contain when grown. On the other hand, the leguminous plants, turnips, etc., retain the ammonia; and when the plants are plowed in, or consumed on the land by animals, they increase the supply of ammonia in the soil.

The White Lupine, Spurry, Bird's Foot Trefoil, Medicago Lupilina, Lucerne and Vetch are also enumerated among those plants of a lower organization, suitable for feeding to animals, which tend to enrich rather than impoverish the soil.

Growing wheat, barley, oats, rye, corn, &c., for feed of animals has impoverished the soil of the older States and it will be productive of great good to the farming districts of even this newly-settled Territory, if plants could be grown for feed, suitably nutritious and at the same time not so exhausting to the soil as the grains now so universally used.

Replanting, where first planting has failed, should now be done without delay.

[For the Deseret News.

A Treatise on the Present State of Horticulture in Utah.

BY E. SAYERS, HORTICULTURIST.

NO. 4.

LONGEVITY AND FRUITFULNESS OF THE GRAPE VINE.

The Great Vine of Hampton Court.

The celebrated Black Hamburg Grape Vine at the Royal Gardens, Hampton Court, England, is perhaps one of the finest specimens of the longevity and fruitfulness of the grape now in existence. This old favorite, if now alive—of which there is little doubt—is at this time nearly 100 years old and has produced from sixteen hundred to eighteen hundred pounds of table grapes of the first quality, annually, for the dessert for more than half a century.

In 1824, while an apprentice at these gardens, the management of the vine was placed under my care and, while thinning the grapes, Mr. Padley, the head gardener—who had been on the place upwards of fifty years—gave me the following account of the vine, which I relate as near as my memory will serve:

He said the vine had always been remarkably healthy and very productive and that it had always been treated in one regular manner of culture. It was, he said, a great favorite with George III, who frequently visited the gardens when it was in full bearing, before cutting the grapes for table.

The vine was then sixty years old, and it's origin was from Hamburg. Four cuttings of the same grape were sent to his Majesty from Hamburg, which were distributed among the different gardens; but, he thought, this was the only one which was propagated and consequently was the parent plant of most of the old Black Hamburg Grape Vines then in cultivation in England.

Mr. P. informed me that this vine, when young, was planted in the very place where it now grows. This was then a small glass pine apple pit, used for the propagation of pine apple plants.

After being planted, the vine grew remarkably fast, so that in a few years the pit had to be enlarged into a large vinery house to accommodate its future growth. This house it also soon covered with its luxuriant branches, and finally the present house was built to accommodate its vigorous growth, which was soon covered with fine healthy branches.

The vine-house, to the best of my recollection, is seventy five feet in length and twenty five feet wide in the clear, with a glass front resting on a brick wall at the back, at an angle of about forty five degrees elevation. The house fronts to the east, and the north end is close to the walk on the border of the river Thames. The vine is planted at the north west corner of the house, close to the back wall. The main roots have found their way under this wall in quest of nutriment.

Cause of its Mammoth Growth.

Mr. P. further said that it had been a question among gardeners, undecided for many years, as to the cause of this vine growing to so large a size and continuing to produce such fine crops of fruit; particularly as no preparation of the soil had been made in planting the vine, nor since; consequently its growth seemed to be spontaneous. Many persons supposed its roots had traversed under the wall and found their way to the side of the Thames and were fed by that means. Others suggested they were fed from the wash from the different parts of the Palace. The mystery, however, was in time solved by accident.

An old drain or sewer from the Palace, which had been choked for several years, was directed by the master of the works to be opened and, in doing this, the workmen discovered a large root leading up the drain, which, on being examined, proved to be one of the main roots from the old vine; consequently the drain was filled up again and the roots were allowed to traverse the length of the drain to feed on the nutritious substances there going into a gradual state of decomposition.

Regular Pruning of the Vine.

Great care had been taken that the vine should be pruned and cultivated in a regular manner and the spurring system of pruning was always adopted.

Its Annual Yield.

The produce had been for many years about two thousand bunches annually, averaging from sixteen to eighteen hundred pounds of grapes. One year it produced twenty thousand pounds; but this was considered to be too great a crop and, since that year, the bunches were always reduced to about two thousand, averaging from sixteen to eighteen pounds of grapes.

Its Culture.

This vine is trained under a roof of glass—the branches being tied to wires, fastened to the rafters, for its support.

As before stated, the spurring system of pruning has invariably been adopted and the vine is pruned about the month of December. The method is simply to thin out the small, weakly branches and to prune off all the young wood of the last year's growth to within one or two eyes or buds from the old wood—leaving the young wood at difierent places on the leading branch, five or six buds long, to keep a regular supply of healthy wood from one year to another. After pruning, the old bark is cleaned off from the wood and the vine is washed all over with a decoction made of tobacco, soap and sulphur, well mixed together.

Tying in the Vine.

After being washed, the vine is tied to the wires in a neat and regular manner with strings of bass matting, so that the small branches are placed in such a position that each part of the vine receives its due portion of sun, air, etc., when growing.

General Management.

The house is closed for forcing about the middle of March, when small fires are made in the flues to keep up a temperature of a night of about forty to forty five degrees of heat, and from fifty five to sixty five of a day, sun heat. In the morning, an hour or two after sunrise, the vine is syringed over with clean water and the floor of the house, which is paved with flag stone, is washed clean in order to keep a sweet, healthy internal air. This management is continued until the young buds become about two inches long, when the vine has to be finger pruned.

Finger Pruning

Is done by going over the vine and taking off all the young shoots or buds but *one* to each spur, which is left for producing the bunches of grapes and which are stopped or nipped off when the young bunches appear.

Stopping the Young Wood.

When the young shoots are grown all over the vine from a foot to eighteen inches long and show the bunches of grapes, they are stopped by nipping off the young branch or shoot one eye or bud above the bunch of grapes. If two or three bunches appear on a shoot, they are generally reduced to one, which is considered sufficient for each young shoot.

Tying in the Young Wood

Is simply to tie in the young branches in a neat, regular manner, so that each has its due share of sun, air, etc.

Management of the Vine in Flower.

When the bunches are in flower the syringing the house is to be suspended—moisture being always injurious to the free setting of young grapes. The heat of the house is also increased to fifty five and sixty degrees of a night and from sixty to seventy five or eighty, sun heat, of a day. Grape vines, when in flower, always require a dry air and good, uniform heat to set the young fruit freely.

Resuming the Syringe.

When the young fruit is well set in the bunches all over the vine, the syringing is then again to be resumed and the heat kept as before. The next business is

Thinning the Grapes.

When the grapes are the size of small peas the bunches are thinned with a pair of long handled scissors. Each bunch is gone over regularly, cutting out a portion of small grapes and thinning the bunch in such a manner that the berries or fruit have room to swell into fine, large sized and handsome, well formed bunches.

General Management and Ripening the Fruit.

After thinning the grapes, the house is managed as before, with the difference that on warm days the vine is syringed about two hours before sundown of an evening—care always being taken that the internal heat is sufficient to dry up the moisture before night; if allowed to be kept moist all night, it is injurious to the vine and often brings on that pest to the grape vine called the mildew.

The Culture during the time of Growing

Is simply to keep the branches always tied up in a neat manner, nipping off all useless branches and the young wood from the points of the bearing wood, leaving nothing but the young wood where it was first stopped on the bearing shoots, and any young wood where it is necessary to fill up any vacant parts of the vine.

Ripening the Fruit.

When the fruit begins to change its color, the syringe is entirely suspended and a dry internal heat is kept up with plenty of air on warm, sunny days, in order to give the fruit a good flavor.

[To be continued.]

Clean Milking is in every respect, the most profitable. A report lately published says that "the quantity of cream obtained from the last drawn cup, from most cows, exceeds that of the first in the proportion of twelve to one." Besides the loss of that part of the cream (coming from what is generally termed "strippings") which adds richness, color and flavor to butter, it is a well-attested fact that, when not milked clean, even the best cows are apt to gradually diminish in the quantity they give.

Potatoes are raised with great success by covering the ground with straw about six inches deep. G. G. Shipman, of Pike county, Ill., writes to the Genesee *Farmer* that he has grown potatoes in this manner for six successive years, and that his least crop was two hundred and seventy bushels and his greatest, six hundred and forty bushels per acre.

We think this mode might be as successfully adopted here.

Apple Trees should be pruned, says a correspondent in the Genesee *Farmer*, in July, for then the wound is soon healed, and suckers or new shoots are less liable to put forth where a limb is cut off. Be careful, however, and not prune when there is no need of it.

A Premium of five hundred dollars has been offered by the Massachusetts Society for Promoting Agriculture, for the best conducted farm in the State, 'taking into consideration the mode of cultivation, farm buildings, breeding, selection and management of stock.'