THE VEGETABLE GARDEN.

Rhubarb.

Rhubarb was first introduced into cultivation in 1735. It came originally from China. The root, used medicinally, came to be called Turkey Rhubarb, because it got into Europe through the hands of Turkish merchants who purchased from the Chinese, among whom it has been used for many centuries. The first attempts at cultivating it were made in 1763. The London Society of Arts and Sciences awarded its gold medal to Sir William Fordyce for raising 300 plants of it in 1791. In 1793, the medal was awarded to Mr. Thomas Jones; in 1794 to Mr. William Hayward, for propagating rhubarb by offsets taken from the crowns of large plants.

Rhubarb is among the most wholesome and most palatable of our garden vegetables, and it is raised so cheaply and easily as sometimes to become a drug on the market. It should have a place in every kitchen garden. The soil cannot be too well prepared for rhubarb. It should be deepened or trenched to at least eighteen to twenty-four inches. The land should be well drained. A good dark loam is the best. At the bottom of the trenches dig any vegetable refuse, weeds or leaves, and plenty of well-rotted stable manure. The soil can scarcely be made too rich.

As soon as the frost is well out of the ground, the crowns may be planted in rows, three feet apart every way; in large varieties more space should be given. The crown should be planted near the surface level, and should not be covered more than an inch.

No stalks should be cut during the first year, but the plants should be allowed to get well established. In the spring or fall a good top dressing of manure will be necessary.

If grown from seed, drill in the seed eighteen inches apart, and cover one inch Thin the plants to six inches apart. When the plants are one year old, proceed as described above. The roots may be taken up in spring and divided.

A favorite variety is the Linnæus, which is one of the least acid sorts, tender and of excellent flavor, early and very productive It was originated by Mr. Myatt.

The Mammoth Victoria is another favorite, which has some imperfections, being thick-skinned, acid, and later than some kinds, but it is of large size and great productiveness

Carrots.

In Belgium and other continental countries, the carrot has been grown as a field crop for a longer time, and to a much greater extent, than in Britain. In the year 1765, the attention of the Society for the Encouragement of Arts, etc., was directed to this branch of husbandry, and, in consequence, an account of the culture of carrots and the uses to which they may be applied, was published by Robert Billing, a farmer in Norfolk, who states that he obtained, from twenty and a half acres, five hundred and ten loads of this root, which he found equal in use and effect to a thousand loads of turnips, or three hundred loads of hay. Some of them measured two feet in length, and from twelve to fourteen inches round. Horses are remarkably fond of carrots, and when mixed with oats they form very good food for them. The efficacy of these roots in preserving and restoring the wind of horses, it is said, been partially known in Suffolk, where carrots were adminstered as a secret specific for the complaint long previously to their being commonly applied as food for that animal. Carrots are equally beneficial as nourishment for cows, sheep and swine. It was stated, some year since, that at Purlington, in Yorkshire, the stock of a farm, consisting of twenty working horses, four bullocks, and six milch cows, were fed from the end of September to the beginning of May on the carrots produced from three acres of land. The animals, during the whole of that period, lived on these roots, with the addition of only a very small quantity of hay.

Carrots contain a large amount of water—eighty-six parts in one hundred pounds. Their most distinguished dietecal substance is sugar, of which they possess nearly six and a half per cent. Starch is also found in small quantities, with a small portion of albumen. The ancients used the seed both of the wild and cultivated carrot as an internal medicine against the bite of serpents. They also gave it to animals that had been stung by them.

Dr. James says that carrots strengthen and fatten the body, and are very proper food for consumptive persons. The root of the garden carrot is much used as a poultice for for cancers, on account of its antiseptic qualities. In some parts of Europe a spirit is distilled from this vegetable. The abundance of sugar contained in the roots is readily converted into alcohol. About one hundred and sixty pounds of the crushed roots are required to yield one gallon of spirit. Sugar has been obtained from them; but, notwithstanding the large amount existing in them, the manufacture has been found profitable. In Germany a substitute for coffee has been made of the roots chopped up into small pieces and partially carbonized by roasting. A dye similar to wood has been obtained from them.

The above we find in the *Scientific American*, and the following practical experience of a correspondent of *The Husbandman*, is equally interesting:

My early experience in raising carrots was of such a discouraging nature that for a long time I regarded raising that vegetable in any but a favorable light The recollection of that experience is vivid. I will tell how that was done, as it will show how not to do it. After the ground was selected it was ploughed and harrowed once, and then marked out by going backward, dragging a hoe handle pressed into the ground, which made a faint mark, into which the seed was scattered by hand, and then covered by dragging the hoe handle back again along by the side of the drill mark, which left the surface perfectly flat, and long before the rows of carrots could be seen the weeds covered the ground completely, so that weeding out a quarter of an acre was work enough for all hands, especially the boys, for some time. This was on the old farm, when I was a boy. Labor was cheap in those days, and by perseverence the piece was finally ready to harvest, which was done by prying them out with a spade. They were then thrown into a wagon and hauled into an out-house, tops and all, and here we had fun every night cutting off the tops till 10 o'clock.

But since becoming familiar with the approved method of to-day, a change "came o'er the spirit of my dream." I no longer regard raising that vegetable in the light of former days In fact, I think it among the best crops a farmer can raise—enough for the horses by all means.

This is the way to do it. Prepare your ground thoroughly by ploughing and harrowing as many times as necessary to make it fine and mellow to the depth of eighteen inches. A subsoil plough can be used. Loosen the subsoil, thus keeping the good soil on top. When ready, commence on one side, draw a straight furrow the length of the piece; returning throw another to the first, which leaves a high ridge. Continue until the whole piece is served the same way, leaving the tops of the ridges about three feet apart. With a hand-rake rake the tops fine and flatten them a little, then with a garden-drill drill in the seed. Treated in this way, a cultivator or carrot-weeder can be started between the rows even before the carrots are up. The weeds are kept down, the hand-weeding and hoeing is quickly done, and mostly as they are trimmed out. In harvesting, cut the tops first with a hoe, then run a plough along side of the row, throwing the earth away from the carrots. This loosens them, and they can be easily picked out.

Blanching Celery.

Some time since, a correspondent of the *Germantown Telegraph* gave an account of how he preserved celery during the winter by standing it in spring-water under a shed. The editor of that journal thus comments upon the plan:

Few persons will have the chance to preserve celery in this way, nor is it perhaps desirable that they should, as there are many ways of preserving it which answer just as well, and which allow of the celery being just to hand, which it is not likely to be by any plan such as that proposed, as it is rare indeed that a spring would be close to one's house, or that one would be willing to put a spring to that use if it was. But for all this the hint of our correspondent is a good one not so much for what it teaches as for what it suggests.

We know of one whose celery did not grow very well last season on account of the drought. At digging time it was what he termed "poor and small," and hardly worth preserving; but taking the water hint of our correspondent, he concluded that by packing the roots in wet earth and keeping them in a cellar the vital principle would be sustained and perhaps the whole become white. The experiment was a complete success, and he has had an abundance of white crisp celery all winter. Large boxes were obtained and a few inches thick of earth placed on the bottom and made as wet as possible. The plants were then packed upright, side by side, as close as they could stand, until the boxes were full. The upper leaves were of course exposed, and attempting to grow a little by the encouragement given to the roots by the wet earth, caused growth enough to go on to blanch the whole.

There is an advantage in this plan besides that of blanching a mass of matter usually stored away green, and which never after becomes white, and is therefore wasted, and that is the crispy freshness which it retains. Those who keep celery by various devices in the open ground and in similar ways have no trouble from this source; but those who keep celery in cellars often complain of it either rotting or withering. In the way described there is just what is needed to keep it fresh and nothing more.

We give this simply as *one* plan which may suit some one person in an emergency, and not as the *best* plan. What is best for one is very often not the best for another, and it never does any harm to know lots of them, and especially one which, like this, gives us a principle which may be applied to many plans.

Useful Tools in Market Gardening.

After procuring most of the new horse hoes and cultivators, and finding each valuable for some especial purpose, we find most use for the common one-horse double-shovel corn plough, so well known throughout the West. The use of these may be greatly increased if the plough be made adjustable, so as to throw dirt to or from as desired, like the two-horse cultivator. Any smith can quickly do it. For garden use another feature should be borrowed from the two-horse cultivator– the shield. By lengthening and bending the arm of one of the sheet iron shields, it can be adjusted on the plant side of the one-horse cultivator, so that no dirt shall be thrown to the plant; or by raising it a little dirt will be thrown only around the bottom, while the top is protected perfectly. For garden use no high-priced machine can equal the common double-shovel cultivator with these unpatented improvements.

For shallow tillage a drag-tooth spreading cultivator is excellent. Better "grip" is given and better work done if the points of the teeth be flattened and bent forward. It is a tool easily made by any mechanic.

On any clean garden soil, and especially our prairie soils, the hand-rake can be largely dispensed with by the use of a simple home-made tool, which, for want of a better name, we will call a "planker." It is made of two pieces of heavy plank, eight or ten feet long, nailed together side by side with cleats, placed at an angle of 45°, so as to meet in front of the centre. After being stoutly nailed at their crossing, a hole is made for the clevis by which the horse is attached. The line of draft raises the front of it enough for it to slide upon the lumps, and the weight of the driver, with the rolling motion given them, combine to crush them nicely. If not fine enough, harrow and plank again until it is as smooth as a floor. We use a hand-rake only for occasional spots, where trash or coarse manure has clogged the planker. A gardener to whom I described it several years ago, wrote me recently: "Your planker grows better every year, still I keep a hand-rake and roller only because they are on the place already." It is also excellent in fitting any farm land for crops, especially for corn.—*Root's Garden Manual.*

MILDEW ON LETTUCE.—When first seen, it is a fine white mould on the under side of the outer leaves which lie upon the ground. The leaves affected with it soon turn yellow and rot away, and the mildew spreads on to the new growth, sometimes nearly destroying the plant, and always injuring it more or less. If sulphur is applied immediately when it first appears, the mildew will be checked, and the plant will generally outgrow it; in fact it often outgrows it without any sulphur, if the weather is clear and dry. The chief trouble is in the dark and damp weather of winter.—*Cor. Country Gentleman.*

TAN FOR MULCHING.—There is a great difference of opinion as to the value of tan as a mulch. A recent writer in *Revue Horticole* cites several instances in which upon fruits and vegetables its effects were disastrous. Several market gardeners near Paris lost all their winter lettuce by covering the beds with tan. Any ill result must be due to the fact that the bark was not thoroughly exhausted. When the soluble matter is all extracted from it, the effect of the tan can only be a mechanical one. Where there are such different experiences it will be safe to expose the tan to the action of rains for some months before using it.

GROWING PARSLEY IN BEDS OF MANURE.—In many places parsley is difficult to cultivate. In some situations the seed will not germinate, and in others the young seedlings wither and die immediately they come above ground. This used to be the way in which it behaved in the kitchen garden at Drumlanrig, and for years parsley there was scarce. Mr. Thomson has, however, entirely overcome the difficulty. After trying it in various ways and positions, he now grows it in beds made up wholly of rotten leaves and strong manure. Thus circumstanced, it grows to perfection, and I lately saw there a large plantation of it in excellent condition. The roots ramify freely in the manure, and the plants become so strong and vigorous as to defy all attacks of insects, which formerly proved so destructive to it. The manure too does not soon become exhausted or need renewing; but if it did, the fine crops obtained from it would soon repay all trouble bestowed in that direction.—*Cor. Garden.*