

## NOTES OF THE STORAGE OF ROOT CROPS.

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**I**N all gardens large enough to produce a sufficient supply of vegetables for the family, one of the prime necessities is a properly constructed house for the storage of potatoes and other roots for winter and spring use. An expensive structure is not required, provided the internal temperature is not quickly affected by sudden changes in the weather outside, the means of ventilation sufficient, and room enough for storing the crops in a manner that will admit of their examination whenever circumstances may render it desirable. Cellars are usually devoted to the storage of roots during the winter, but they are generally too damp, and also insufficiently ventilated; consequently the danger exists of the quality of the produce being impaired, and the health of the occupants of the house injured, by the exhalations arising from decay.

The most essential matters to be considered in keeping roots through the winter, are to exclude the air from them to preserve them in a plump condition; at the same time to provide the means of allowing the ready escape of all noxious exhalations, and to remove all roots commencing to decay before they contaminate others contiguous to them.

The root-house should be erected with the floor a few feet below the general level, and in a shady situation, the north side of a wall or building being probably the most suitable. The sod taken out in excavating the foundations, etc., should be banked up against the walls, for it will help to keep the house warm in winter and cool in summer. A thatched roof is preferable to one of slate, and if the latter is employed the roof should be lathed and plastered for the purpose of securing a more regular temperature. The most convenient-sized house will be one twelve feet in width and eight or ten feet in height, and of a sufficient length to hold the greater proportion of the crops grown. The length must be determined by the requirements of the family, but the width here given will admit of shelves four feet in width on each side, and a walk of the same width in the centre. Two shelves of stout boards on each side will suffice, and the first should be about four feet from the floor, and the second three feet above it. The uprights and cross pieces supporting the shelves must be of sufficient strength to support the rather heavy weight they will have to bear, and to keep the roots in their proper place grooves on the uprights should be provided for fixing boards in front when required. This can be readily done by nailing two strips of wood at a distance of about two inches apart. It will be better to fix the ventilators in the roof, and then air can be admitted without its having to pass so directly over the stores as would otherwise be the case. The pathway may be of bricks or foot tiles, the latter being the most preferable; stone or slate may also be employed.

In arranging the house for the reception of the roots, the potatoes, because of their larger bulk, should be put on the floor, and such things as carrots are best upon the shelves above; but, if necessary, a portion of the shelves may be devoted to the potatoes. The top shelves will be the most suitable place for the onions, which, as is tolerably well known, require no covering.

All vegetable roots keep best when stored in a rather dry state, and therefore dry weather should, as far as practicable, be taken advantage of for lifting them; and if this is inconvenient, and the work done in wet weather, or when the roots and the ground are in a wet state, they must be spread out on the floor of an airy shed, or one of the fruit houses, until they have become rather dry. Potatoes form no exception to the rule, but a mat or some other light covering must be laid over them to keep the light from them. In packing the potatoes away for the winter, it is a very good plan to sprinkle dry lime over them in sufficient quantities to just cover the outside of the tubers. They do not, it must be understood, require to be packed in a mass of lime; it is simply necessary to sprinkle, as each lot of potatoes is put in the bin, a few handfuls of lime over them, and then turn them over and sprinkle a little more. Put a good thickness of straw next the wall, and also on the approach of severe frost over the potatoes. At other times a covering sufficient to keep the light away, from them will be all that is required.

Beet, carrots, salsify, and scorzonera should be taken up some time in October or November, and stored in dry sand. When the roots are dry enough for storing, lay them rather close together on their sides, and put sufficient sand over them to fill up the intervening spaces. They will thus keep quite plump and fresh, and if injured roots are rejected, there will not be much danger of their decaying until the spring season.

Parsnips, Jerusalem artichokes, and turnips, may be left in the ground all the winter, but in the majority of cases it will be better to lift them and store them in sand. They can be kept in first rate condition, and ready for use when required, and the quarters in which they are grown are set free, and may be dug up and left in a rough state to expose the soil to the action of the weather. It is not only important to turn over the soil as early in the winter as the circumstances will permit, but it is desirable to push on with all the heavy work as fast as possible, to ensure its being completed before the head and the hands are taxed in the spring with the work properly belonging to that season. Turnips are not often stored, for it is generally supposed that they keep better in the open ground, but it is very certain that severe frosts do them no good, and also that they start into growth and become spongy and worthless, whilst those in the root-house remain quite firm and of first-rate quality.

With regard to the attention required by the root crops during the winter, it is simply necessary to say they will want overlooking two or three times in the course of the season, for the purpose of removing such as are unsound, or likely to become so in a short time. These should be put on one side for immediate use, if not decayed. The shoots must be removed from the potatoes, for they soon become of

little value if these are allowed to grow unchecked. It need hardly be said that matters of this kind should have attention when the weather is unfavourable for outdoor work.

Potatoes and all the other roots mentioned may, if there is no root-house, be kept in clamps. In making clamps, select a dry, sheltered position, and if the subsoil is naturally dry, open out a trench about four feet in width and two feet in depth, and of a sufficient length. In this lay the roots, bringing them to a point at the top, and then cover with a good thickness of straw. Over this put not less than twelve inches of soil, and make it firm and the surface smooth, to throw off the heavy rains. On wet soil lay the roots on the surface in the manner described, and obtain the soil for covering them by digging a trench two feet in width all round, and as deep as may be required for obtaining enough soil for covering the clamp.

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### THE GARDEN GUIDE FOR OCTOBER.

**KITCHEN GARDEN.**—Asparagus to be cut down to the surface of the ground, be well cleaned, and covered with four inches of half-rotten dung. The spade must never be used either on the beds or in the alleys. Cabbage to be hoed between, to destroy the weeds which have abounded since the autumn rains commenced. Plant out the main spring crop, and earth up the collards. Those last sown to be pricked out to strengthen on four-foot beds. Cauliflowers to be planted out under frames and hand-lights, and some potted. If there are many plants still left in the seed-bed, prick them out on a warm slope, or make up a raised bed for them, so that they can have the protection of mats or hoops during sharp weather. Rhubarb to be forced may now be taken up, and laid on one side until it is time to put in the boxes, or whatever other position it is to occupy when forced. In storing potatoes, be sure they are dry first; if taken up in wet weather, spread them out in a shed or outhouse, but do not expose them to the light more than can be helped. Parsnips keep best in the ground, to be dug as wanted. Beet to be taken up at once; cut off the leaves an inch above the crown, and avoid bruising or cutting the roots; carrots treat the same; store both in sand or dry earth. Earth up cardoons; take up scorzonera and salsify, and preserve in sand. Winter greens can scarcely be overdone on the ground, though they may be in the pot. As there is now much ground vacant, another hunt of the seed-bed will show some plants worth moving to plant out; if they do not make great hearts, they will nevertheless be useful in the spring.

**FRUIT GARDEN.**—Fruit trees that are making gross shoots may often be compelled to direct their energies to better results by some disturbance of their roots. We have had, before now, to heel over a whole plantation of plums when a warm autumn and moist weather set them growing again late in the season. Of course, large trees must not be so dealt with; but they are more obedient to the wish of the cultivator, and rarely grow too much when in a good bearing