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A. E. LOVETT, Acting Director

STORING VEGETABLES FOR HOME USE

By

E. P. SANDSTEN

Pit of Beets opened April 15th

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STORING VEGETABLES FOR HOME USE

By E. P. SANDSTEN

The use of the common vegetables during the winter should be encouraged. They are easy to store and in the fresh state they are more desirable than the preserved products. The value of vegetable diet is well recognized by the physician and the general public, and more should be done to encourage the use of vegetables during the winter months. Contrary to popular opinions most of the common vegetables can be stored in an ordinary cellar, if the following precautions are taken to keep them from deteriorating. In order to supply the information on this subject, the following pages are written.

Root crops which can be easily stored in an ordinary cellar are, potatoes, beets, carrots, parsnips, winter radishes, turnips, ruta bagas, salsify, kola rabi.

VEGETABLES TO BE STORED

There is a considerable difference in eating quality as well as storing quality of the different crops enumerated. Small ill shaped vegetables are usually bitter and woody. The same is true of large over-grown specimens. These are usually either course and soggy, or else woody. They do not keep well and are inferior in food value. It is very important in the case of root crops that smooth medium sized specimens are stored. They should be free from dirt, but not washed. They should be perfectly dry and in cutting off the tops of the root vegetable, the cut should not be made too close to the root so as to expose a portion of it, but rather leave the neck connected with the root. Their keeping qualities are greatly increased. All the root crops require about the same condition in storing. This enables one to store them together without having to separate them. The storing should not be done until late in the autumn, in order that the vegetables may be fully matured. That is, they have ceased to grow. The immature vegetables, or vegetables that have matured sometimes previous to harvest, will not keep as well, nor do they have the quality that properly matured vegetables have.

STORAGE

There are a number of ways in which vegetables may be stored, but for a small or large family the following method or methods have been found to be most satisfactory. Provide boxes of sufficient size to hold the quantity of vegetables required. In the bottom of the box or boxes place a layer of fine moist sand (not wet) two inches deep. Then place a layer of vegetables and then another layer of sand about one inch deep. Continue in this manner until the quantity desired is stored. The box or boxes should then be placed in a cool cellar away from the sunlight. If the sand shows signs of drying up, as it usually does, that is the top layer, sprinkle it with water to keep it moist. If the cellar is of sufficient size the vegetables may

be kept in piles on the floor, using the sand as in the case of the boxes, to retain the vegetables. The object of the sand is to prevent the vegetables from drying out and becoming shriveled.

Where larger quantities are used, and proper cellar space is obtainable, the vegetables may be kept in piles or in bins loose. When kept in this condition, it is necessary that the air of the cellar is kept moist either by sprinkling the floor at frequent intervals, or by keeping a vessel of water in the cellar. Sufficient ventilation should be given from time to time, but precaution must be taken to prevent the evaporation or the drying out of the vegetables by having strong current of air circulating.

All root crops may be stored in the open. This need is often made use of by large growers who lack the necessary storage space. The outdoor storage is a success if the vegetables are properly cured and all cut and bruised vegetables are eliminated. The place of storage should be made convenient to the house, and on a piece of land that is well drained. The surface soil is taken off to a depth of four or five inches, in the shape of a rectangle. The size of the excavation should correspond with the quantity of vegetables or roots to be stored. A thin layer of clean straw is placed in the excavation and should extend four or five inches outside the excavation. The roots are then placed up in a pyramidal form. The usual width of excavation is from four to six feet in width and any desired length. The roots are then piled up and when completed a layer of straw ten to fifteen inches in thickness is used to cover the pile. This should follow with two or three inches of soil. Opening should be made at the base of the pit and also at the top to permit a circulation of air during the sweating process which follows immediately after the storing. As cold weather approaches, more earth is used until the pile is covered to the depth of five or six inches. If the climate is very severe another layer of straw is added and then six or eight inches of dirt on top of this covering will usually prevent freezing even during a very severe winter. When cold weather sets in the ventilating holes are entirely closed up. The pit may be opened during the warm days, provided that it is partly closed so as not to chill the vegetables inside. This method of storage is used most for large quantities and where the owner wishes to keep them until spring.

STORAGE OF ONIONS

Onions are more difficult to keep than the root crops. They are susceptible both to high temperature and to moisture. They may be stored in the average cellar in shallow boxes holding not more than two or three layers of onions. It is very important in storing onions to secure only bulbs that have been fully matured and are hard. Onions that were late in maturing and specimens that have thick necks and have to be cut off in order to harvest, should never be kept for storage purposes. The tops should have died down completely and no scar should be left where the top was. Another

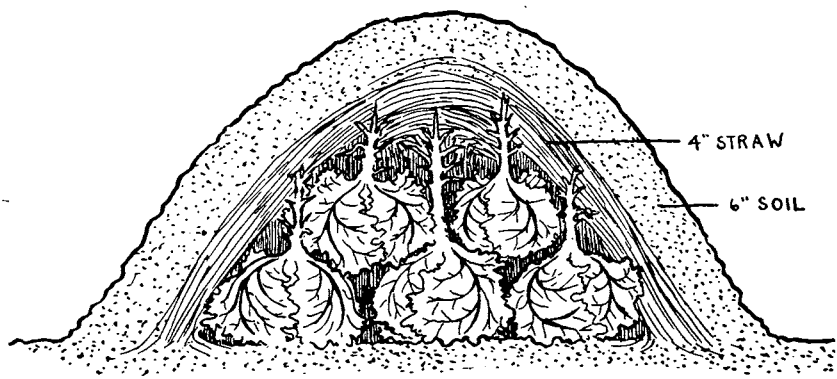
method of storing onions which has proven very successful, is to place them in a box out of doors. The box should be removed from contact with the soil so that the moisture will not go through the boards and when freezing weather sets in the onions should be permitted to freeze solid. When frozen solid the box should be covered tight and some kind of material like straw placed on top so that the onions will not thaw out during the warm day. The object of this method is to keep the onions frozen from fall until spring continuously. The onions so stored are easily accessible when wanted, and can be thawed out slowly in a cool place without loss of quality.

CABBAGE

There are several ways of storing cabbage, but as in the case of other vegetables, the storing success depends to a large measure on the quality of the cabbage to be stored. Solid heads should be selected. Where only a few heads are needed these may be stored in a cool cellar. The roots and the outer leaves should be removed in the field, and the cabbage exposed to the drying influence of the air and sun for a couple of days. This will wither and dry the outside leaves forming a protecting covering for the cabbage. When sufficiently dry they should be taken into the cellar and placed on the shelf and left until wanted. It will be found that cabbage stored in this way will remain in good condition for several months. The outer leaves will dry and protect the cabbage from decay.

Series of Compartment Pits

Another method that is frequently employed is to pull the cabbage with the roots attached, and after removing a few of the outside leaves, and after any surplus moisture has been dried off, they are hung up by the roots to the ceiling or walls in the cellar. The cabbage may also be stored out of doors and for a small family the following method has proven a success. Take an ordinary sugar barrel



Cabbage Pit

and sink it in a hole in the ground deep enough to hold the barrel completely. Place a little clean straw in the bottom of the barrel and fill the barrel with solid heads, trimmed and the roots removed. Place a thin layer of straw on top and cover with a few inches of soil or coarse material. This should be done late in the fall. The cabbage is easily accessible during the winter, and the keeping qualities, if the work has been rightly done, are excellent. The barrel should not be placed where there is seepage water, or on ground where water is apt to enter in the barrel.

Another method of storing cabbage in the open field in trenches was formerly used quite extensively, but the losses were very high and the cabbage is not excessible during the winter, and for this reason this method is not recommended.

CELERY

Celery is one of the more difficult vegetables to store in small quantities, and under average conditions. It is doubtful that proper conditions can be obtained in the average home. For fall use, up to Christmas, celery may be left in the open field and stored later for holiday use in the cellar. In the open field when freezing weather is apt to injure the celery (ordinary frost will not hurt it) the rows or ridges in which the celery is grown may be covered with a layer of clean straw and poles or boards placed over the same to prevent it from blowing away. By using this covering, celery may be left in the open field for a month longer than if no protection were given. When time for storage has arrived the celery should be dug out, the

root system being kept intact, and transferred to the cellar in a bed of moist sand. As much of the sand as will adhere to the roots should be left. They are reset or placed in the sand in very much the same way as in the field. The sand should cover the whole plant, leaving the top leaves out. The sand should previously have been moistened. The celery at time of transfer should be dry in order to prevent rotting and rusting. By keeping the cellar cool and the sand moist, the stalks may be kept for a couple of months.

SQUASH

Squash is one of the easiest vegetables to keep during the winter. Only well matured specimens should be stored. The maturity can be easily gauged by the hardness of the shell. When it is impossible to dent the shell with the thumb nail, they are in the right stage of ripeness. They should be harvested before frost as frost will injure their keeping qualities. They should not be pulled off the vines, but cut off, leaving one or two inches attached. They should be left out during the warmth of the day, after they are separated from the vines, and in the afternoon taken to the storage cellar. The best place to keep squash is the furnace room. Shelves should be provided and the squash kept on these shelves. A temperature from 60 to 80 degrees F. is not too warm. The warm and dry atmosphere will harden the shell more and increase the keeping qualities.

PUMPKINS

Pumpkins require cool medium moist air. If the air is too dry they will shrivel and if it is too moist and warm they will soon decay. A temperature of from 40 to 50 degrees F. or the usual temperature of a storage cellar is the best. Good results are often obtained by keeping the pumpkins in dry material like straw or dry sand. The ordinary cellar is the best storage place. They should never be kept in piles, but should be separated so that each pumpkin will not touch its neighbor. Only ripe and matured specimens should be stored. As in the case of the squash part of the stem should be left attached.

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