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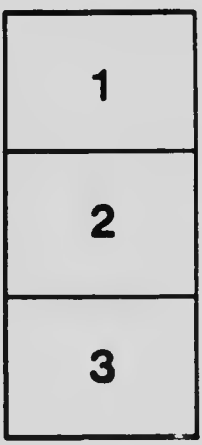

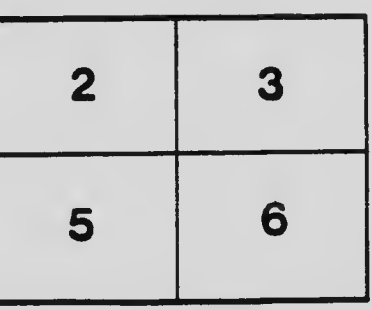

PITTING ROOTS.

BY

F. S. BROWNE, B.S.A., Assistant to Dominion Agrostologist.

Method of piling roots in a pit on sandy or sloping land.

DOMINION EXPERIMENTAL FARMS.

J. H. GRISDALE, B.Agr.,
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Dominion Agrostologist.

EXHIBITION CIRCULAR No. 57.

(January, 1916.)

PITTING ROOTS.

Unforeseen circumstances often necessitate extra storage space for field roots or potatoes. Such space may be easily and cheaply obtained by pitting outside, as in a properly constructed pit field roots or potatoes will keep throughout the winter months as well as, if not better, than in the best of cellars. Especially is this true with roots that are to be used for seed-raising, for in a pit evaporation is reduced to a minimum and the roots are, therefore, fresh and crisp in the spring with a consequent maximum vitality.

A pit to keep roots successfully outside during the winter should be well drained, and so constructed as to maintain an even temperature at which the contents will neither grow—and subsequently rot—nor freeze. Such a temperature can be maintained only by providing for adequate ventilation during mild weather and by having practically no ventilation during steady cold. The following describes two types of pits—each suited to a different situation—that have given perfect satisfaction at Ottawa.

PITTING ON SANDY OR SLOPING LAND.

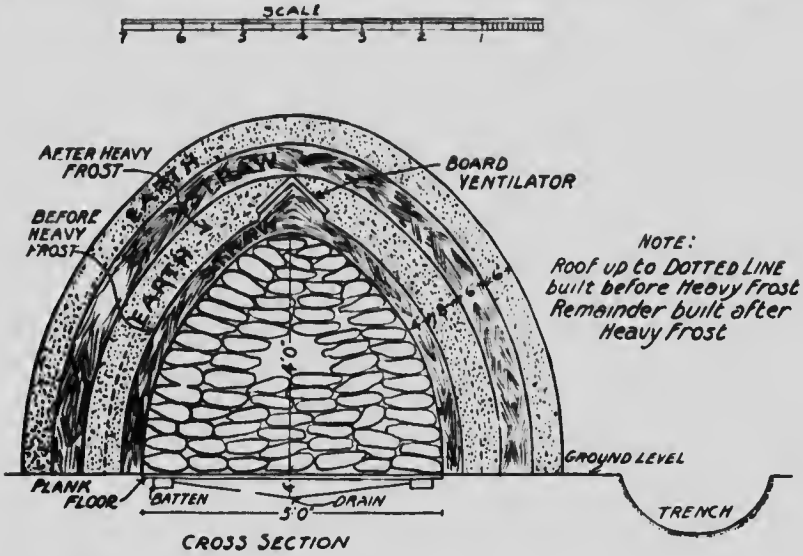
The most satisfactory site for a pit is a naturally well drained position, such as the side of a hill or the top of a knoll. If the soil on such a situation is of a sandy or gravelly nature the question of drainage need not be further considered. A shallow trench 8 inches deep, 5 feet wide and of the required length should be dug, and the earth thus removed thrown back 3 feet from the edge. The roots may then be piled

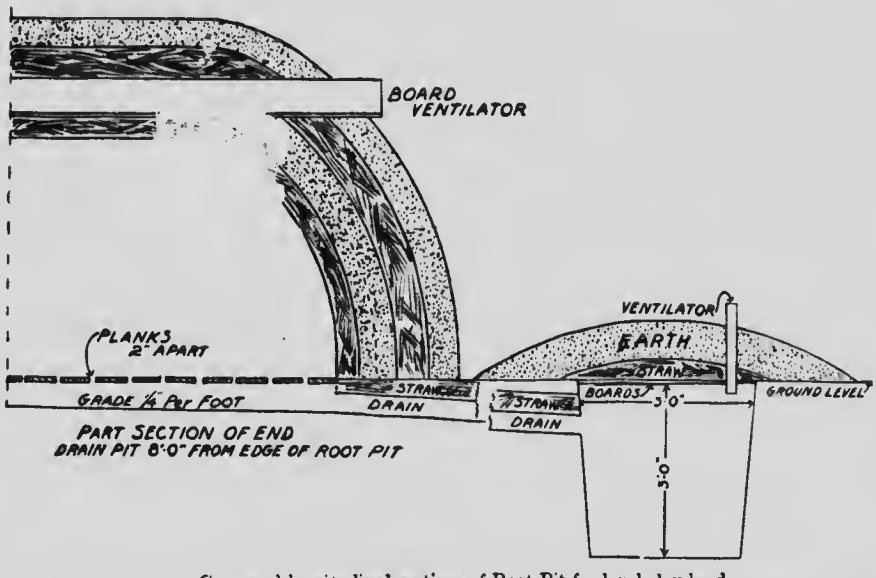
A pit with cross ventilators ready for winter.

up in this trench in a neat pile so as to come to a point about 4 feet above the level of the ground. In building this pile it is advisable to place the outside tier of roots with their tops to the outside, thus obtaining an even surface for covering. A pit of this height and width will hold about one ton to each 4½ feet length.

COVERING.

A layer of about 4 inches of coarse straw is sufficient for the first cover. This should be held in place by a layer of about 3 inches of loose earth, laid to within 8 or 10 inches of the top and about half way round the ends. This will leave sufficient space for ventilation. Rain should be prevented from entering the pit by laying a couple of boards along the top in the form of an inverted "V" trough.





Cross and longitudinal sections of Root Pit for level clay land.

During the latter part of November the covering of earth should be increased to 8 inches and the ends covered in. The opening at the top should also be narrowed to about 8 inches, or closed up, leaving openings of one foot in diameter every 5 feet for ventilation.

Later on in the season when steady cold weather is about to set in the covering should be increased by another layer of straw about 6 inches thick which should be followed by at least 6 inches of earth. In making this last covering it is advisable to cover the ventilation holes or strip, as the case may be, with straw only up to the level of the second covering of straw.

If it is decided to provide ventilation by means of holes, a trough made of a couple of boards 8 inches wide and 3½ feet long should be inverted over each hole at right angles to the pit after the second layer of straw is put on (see illustration on page 2). The last covering should then cover the troughs entirely excepting the ends, which in very cold weather may be stuffed with straw.

If the ventilation is to be had by means of a strip left uncovered along the top of the pit, a trough running the entire length of the pit may be used (see illustration on page 3). This should be put on and covered in the same manner as the short troughs.

When the weather begins to get warm in the spring the ventilators should be cleared out down to the first layer of straw, and the outside layer of earth removed when it has thawed through. With the pit in this condition the roots will keep until about the time that grain should be seeded. Later than this it is not advisable to keep them in a pit. The cost of pitting roots or potatoes in this manner exclusive of hauling is approximately 55 cents per ton.

PITTING ON LEVEL LAND OR HEAVY CLAY.

If the only available site for a pit is on heavy clay or very level land, it is necessary to provide drainage as shown in the cut on page 3. A shallow trench 4 inches deep sloping up to the surface of the ground, so as to make it about 4 feet wide, should be dug to the length required for the pit. If the land is absolutely level this trench should be 3 inches deep at one end and about 6 inches at the other. A board drain may now be inserted into the lower end of the trench, and run away in a deepening trench to a drain hole 3 feet deep and 3 feet across, 8 to 10 feet from the end of the pit. This hole should be covered with boards, and both it and the drain covered with 6 inches of straw followed by the same amount of earth. On very wet land a trench may be dug at a suitable distance all around the drain hole and pit to prevent seepage of surface water into them.

The trench on the pit site should now be covered with 2-inch planks, five feet long, placed about 2 inches apart for the entire length and covered with 4 inches of straw. The roots may then be piled up on top of the straw and covered in the manner previously outlined for pitting on sandy or sloping land.

Published by authority of Hon. MARTIN BURRELL, Minister of Agriculture, Ottawa, Ont.