

they are apt to damp off. Care should be taken, on the other hand, to prevent their being chilled or frozen.

Protection.—Provision should be made for the protection of the hotbed during severe weather and cold nights. This can be done by means of board shutters, old rugs or clean straw. The board shutters may be placed snugly down over the sashes and fastened in place. The rugs are spread over the sashes and secured in case of winds or storms, and the straw is piled over the surface to a depth of a foot, in a way that it cannot blow away.

Watering.—The soil in the hotbed must be watered when necessary, care being taken not to overdo this, as the plants would then be likely to damp off. No single operation connected with the maintenance of a hotbed is of more importance than watering. The time and method of watering determine the growth of the plants, their freedom from disease and the effectiveness of the hotbed. Watering should be done in the morning and on bright days only. The use of water in the evening lowers the temperature of the hotbed at the most critical time of day. A moist atmosphere at night also stimulates the development of disease, and has a tendency to weaken the plants.

Picking Out.—After the plants have developed to a height of an inch or an inch and a half, they should be picked out into another sash or cold frame, or into another part of the same bed. The transplanting of the little plants at this early stage encourages the development of sturdy, healthy plants with better root systems. Plants in the hotbed should be picked out at least twice before transplanting to the garden. In picking out the first time, the aim should be to allow each plant a space of an inch and a half or two inches each way. The second transplanting in the hotbed should come two or three weeks after the first, and the distance between the plants increased to six inches each way. They should be left in this way for ten days to two weeks. The cabbage may be transplanted to the garden any time after May 15th, and the tomatoes in early June.

Hardening Off.—To have success with transplanting hotbed plants to the garden, it is necessary to have the plants properly hardened off. The term hardening off as applied to vegetable gardening means the acclimatizing of the plants to outside conditions. This is done by removing the sashes from the hotbed for a number of days prior to setting the plants into the garden. For the first few days in this period the sashes are removed for only a few hours during the warm part of the day. The length of time is gradually increased until the sashes are left off pretty much all the time for a day or two before setting out.

IV.—INSECT AND INSECTICIDES

It is not possible, in this connection, to enter into the specific differences which distinguish families and groups of insects from one another. For our purpose it is sufficient to know that those insects which, as a rule, are most injurious to crops are of two classes; insects which gain their sustenance by biting or devouring the tissue of the plant, and those which gain their sustenance by