

(7) The electric hotbed may be used for fall plantings, when maximum heating is needed at the end of the growing period. Manure loses its heating value in four to six weeks.

(8) Automatic control may readily be used to keep the soil or air at any predetermined temperature.

(9) These advantages improve the working conditions for the grower, and make plant raising a more interesting occupation.

CONSTRUCTION: One of the most convenient forms in which electric heat may be applied to the hotbed is by the use of insulated lead covered heating cable buried about six inches in the soil. The cable consists of a No. 19 nichrome resistance wire covered with asbestos insulation and enclosed in a lead sheath. The total thickness or diameter of the cable is slightly less than 1/4 inch. The cable is quite pliable and easily laid. Some manufacturers use a copper sheath.

It is recommended that the electric bed be located similarly to any other hotbed. A southern slope, protected from cold winds, and good underdrainage, are important. When so located, hotbeds show the best results in economical operation and plant growth.

Dig a pit about fifteen inches deep and about one and a half feet wider and longer than the bed frame. Fill in with about eight inches of cinders or other heat insulating material. Place the frame in the centre of the pit, and fill around the frame with insulating material. Lay one inch of soil or sand on top of the insulating material inside the frame. Lay the cable. Cover the cable with another inch of soil, and over this place a divider, such as screen wire or canvas. On top of the divider fill with five inches or six inches of rich soil. See Fig. 1 for complete specifications of this bed.

Many variations in the type of bed construction may be made to suit the material available, but in all cases every effort should be made to conserve the heat generated. Attention to this detail reduces the consumption of electric current and therefore the operating cost. We suggest that the following points receive consideration:

(1) Joints should be tight so that the wind cannot blow into the bed.