

FRAME BEDS.

A frame may be put around the bed. This constitutes the first step towards protecting the seedlings.

To be satisfactory, this frame should be set down at least two or three inches into the soil. The surroundings must be kept as clean as possible, as weeds afford shelter to insects and parasites of all kinds.

Surface shelters are used to make the protection complete. They may consist of light cloth (muslin, cheese cloth), oiled paper or glazed sashes, according to the rigour of the climate.

There are also several classes of frame beds according to the method of making, viz:—

- (1) Cold bed.
- (2) Semi-hot bed.
- (3) Hot bed.

(1) *Cold bed.*—On the spot which has been selected for the bed and which should be sheltered from the wind and well situated, generally on high and well drained ground, a wooden frame is laid. This frame should not be more than 5 feet wide; the sides are 12 and 17 or 18 inches high respectively, giving a slope of about one inch to every foot. This frame is filled with good earth to a height of four to five inches; a layer of fertile mould (vegetable earth) about one inch thick, is spread on top and the seed is sown on this layer of mould. The sides of the bed are carefully banked up and a surface shelter is put over the bed.

There are other ways of preparing the bed. For instance: instead of filling in the frame with soil brought from the outside, the surface of the bed is turned over with a spade and the frame laid on this spaded soil and set down as deeply as possible, at least 2 or 3 inches.

The first method is the better as it insures better drainage.

The earth in the bed may be fertilized and treated as that of an open bed. This point will be discussed further on.

As will be seen, a cold bed does not receive any other heat than that which is supplied by the sun and which is retained by the surface shelter.

This kind of bed, established on a cold soil, as is usually done in some parts of Canada, cannot generate any heat in cloudy weather. Generally, it is exposed to the frost and, in any case, is seldom warm enough to insure a regular growth of the young plants, and at best, only during very short intervals.

Cold beds may be successfully used in temperate climates. In the province of Quebec, their use is attended by a great many risks:

(2) *Semi-hot beds.*—A semi-hot bed, like a cold bed, is enclosed in a wooden frame, but it differs from the latter in the fact that the layer of soil in which the seed is to be sown, instead of lying directly upon the earth or being composed of the latter (when the spot is merely worked over with a spade) is separated from the earth by an insulating layer, capable of giving off a certain amount of heat.

This layer is generally made up of horse manure which starts fermenting as soon as the bed is made. This layer of manure should be rather thin, only 3 to 4 inches, otherwise the temperature would rise too high and a hot bed would be the result.