

Sometimes, in order to avoid an excess of heat, equal parts of horse and cow manure are mixed together. The latter has a regulating effect; there is not so much heat given off at any time and the heat is more lasting.

It is always advisable to place the layer of manure on a pervious foundation 3 or 4 inches thick, made of branches, straw, oat chaff, tobacco stalks, etc., in order to make better use of the heat given off by the manure and improve drainage conditions.

But even this layer of manure may be dispensed with. During the last few years, this Division has experimented with a kind of semi-hot bed which does away entirely with the use of manure.

This bed consists of a layer of tobacco stalks or cornstalks firmly packed and well levelled. This is covered with a thin layer of straw which holds the mould and prevents it from working down in the interstices, thereby causing the bed to collapse. The thickness of the layer of mould varies from four to six inches.

The latter system has, so far, given the best results in the province of Quebec. It is specially recommended by this Division. A detailed description of it will be found further on.

(3) *Hotbeds*.—Hotbeds are chiefly used by gardeners and horticulturists. They are especially useful when it is desired to hasten the growth of the seedlings; they differ from the semi-hot bed in the fact that a much thicker layer of horse manure is used, often from 8 to 12 inches. Cow manure is very seldom used in mixture with horse manure.

There are a great many objections to this bed when used for the production of tobacco seedlings. Of course, these seedlings are very early, but as a rule, they are weak, with a tendency to become yellow, and the development of mushrooms and diseases of all kinds is greatly encouraged.

Hotbeds should be used only when, owing to special circumstances, the sowing has to be delayed until a very late date in the season, but even in this case it is preferable to use a semi-hot bed and hasten the growth of the seedlings by watering with a solution of nitrate of soda some time before transplanting.

GREENHOUSES.

Greenhouses seem to be the most up-to-date method for the production of tobacco seedlings.

In some market gardening districts, making a specialty of the production of early vegetables, especially tomatoes, gardeners have found it necessary to build greenhouses. These gardeners soon perceived, particularly in South Essex, that a large profit could be made by supplying tobacco seedlings, at prices varying from \$1.50 to \$2.50 per thousand, according to the season, to the growers of the neighbourhood whose beds had been a failure. A regular market has now been established, some growers are relying exclusively upon gardeners for the seedlings necessary for their plantation and this production of tobacco seedlings for sale has become a regular industry with some greenhouse owners.

Generally speaking, the construction of a greenhouse is expensive, and the expenditure involved is hardly justified when the only object is the production of tobacco seedlings. Greenhouse seedlings may be a little earlier than the seedlings grown in a semi-hot bed, but they are certainly not better and they cost more.