

diation is not only hurtful to the plants by causing sudden and extreme changes of temperature, but, if allowed to proceed too far, will cause the heat of the bed to "run out." Let the shelter, therefore, be as thorough as possible. Six feet would be none too high for the fence; but three feet would be much better than none.

The location should not only be well sheltered, but it should be dry. If the material of the bed becomes unduly wet, fermentation will cease, and with it the heat. Manure will no more ferment when it is too wet than when it is too dry.

Hot-beds are sometimes made on the surface, and sometimes in pits. We shall describe the formation of both, though we give a decided preference to those made in pits. But first of all let us get ready the frame, which should be made of well seasoned pine, from an inch to an inch and a half thick. Six feet we have found to be a convenient width from top to bottom. The length must be determined by the reader's wants; we would not advise less than two sashes in length, even for a very small place. The height at the back may be from 18 to 20 inches; the front three inches less. If boards are scarce, the back may be 12 inches high, and the front 9. If the frame is of any considerable length, it should be strengthened by cross bars, three inches by one. It is quite usual to make the frame of rough boards; but it is neater, and in the end cheaper, to plane and tongue them, and give them two or three coats of stone paint. The inside should be white, but the outside may be of any color that suits the taste.

The sashes will be about three feet and a half wide; the exact width will be determined by the size of the glass. The largest glass that we use is eight by ten. The sash frame should be made of stuff not less than one and a half inches thick. The sides of the frame may be an inch and a half or two inches wide, the top piece two inches wide, and the bottom piece two and a half or three inches. The glass should be bedded in aquaria cement, and the laps should not exceed an eighth of an inch. Some sort of cover will be needed. Straw mats are the best and cheapest that can be got conveniently. In frames that are started very early, for forcing cucumbers, &c., some additional covering will be needed, especially on very cold nights; and this will be afforded by boards, or by doors made on purpose:

Having prepared the frame, let us now turn our attention to the materials for forming the bed. For this purpose we can use manure, or leaves, or manure and leaves combined. Manure alone gives the strongest heat, leaves the most durable. Where a moderate but long-continued heat is desirable, leaves alone should be used. For general purposes, it is an excellent plan to add from a third to a half of leaves to the manure. Oak leaves alone have been recommended for this purpose; but you need not trouble yourself on this point, but go into the woods and gather any leaves you can find; we have found them all good.

If the bed is to be made entirely of leaves, proceed as follows: Pat down a layer about a foot thick; and beat or trample the leaves firmly together. If they are dry they must be moistened, but not soddened. Put on layer after layer in the same way, and be sure to pack the leaves together, otherwise fermentation will hardly take place. - The heap should, if possible, be made under a shed; otherwise it should be covered with boards or straw mats. In about a week the heap should be turned, the leaves being well packed together, as before. In three or four days more the bed may be made.

Mark out on the spot selected a space two feet wider and longer than the frame. On this place the leaves in layers, beating them well together with the fork. Continue in this way till the bed is about four feet thick, finishing the top off evenly. Then put on the frame and sashes. The straw mats must be put on every afternoon just before the sun goes down; and this must be continued until there is no longer any danger from frost. That part of the bed of leaves on the outside of the frame must be covered with coarse litter, lay, or straw. The litter should lay well up against the frame.

In the course of a day or two the heat will begin to rise, and when this takes place is the time to put in the mould. This may be any light garden mould, but it must not be wet or muddy. The heap of mould should be prepared beforehand; a good plan being to lay it aside under cover in the fall. Put in from six to eight inches of mould, spread it evenly, and avoid any unnecessary exposure of the frame. When done, close up the frame tight. In a couple of days the soil will be nicely warmed through. It will be necessary, when the