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A SIMPLE STEAM STERILIZING BOX

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(Editor's note: While visiting Leben's Greenhouses, we noted that their steam sterilizing box was simple and easy to construct, yet of such a nature that it should stand up well for a long time. We asked Nick to write an article about his unit so that other growers might profit from his experiences.)

Our steam sterilizing box is portable and is constructed with a frame of two by fours which support the one-quarter inch Flexboard (cement asbestos board). The box is eight feet long and six feet high so that a minimum of sawing of the Flexboard (available in four by eight-foot sheets) is necessary. The width of the box is five feet so that two rows of flats, end to end, may be accommodated.

We constructed the wood frame first and fitted the Flexboard on the inside. This method provided a very tight fit and prevents rapid rotting of the frame which would occur if the wood were exposed constantly to the heat of sterilizing. The doors are on one end only and open the full end of the box for ease of filling and emptying. These doors require heavy strap hinges as the Flexboard is quite heavy. It was necessary to use a beaded form of weatherstripping around the door to make a tight fit. The floor of our box is of wood construction covered with linoleum. Contrary to expectation, the linoleum held up well.

The steam is fed in through a one-and-one-quarter inch pipe at the bottom of the box through the rear wall. When the box is filled with 220 flats separated from each other in the stack by a lath (to allow quick, uniform distribution of the steam), approximately one-and-one-half hours are required for sterilization.

After using this box for several years we find that a few improvements could be made. Having doors on both ends would make it possible to open one end into a building or greenhouse, and the other to the outside for ease in filling and emptying. The floor could be made of Flexboard board and covered with wood boards to protect it from breakage. The Flexboard shows no sign of deterioration and had done a very satisfactory job.
