

An Improved Mouse Restraining Chamber

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A mouse restraining chamber was engineered to minimize production costs, and designed to prevent mouse tail withdrawal while in contact with *Schistosoma mansoni* cercariae. Although Stirewalt and Bronson (1955) described the first plastic mouse restraining case, it never gained common laboratory usage because the complicated locking and holding mechanism resulted in excessive production costs. Our improved chamber, of simple design enabling low unit cost, fabricated from 32 mm thick plexiglass sheet according to specifications illustrated in Figure 1.

Using this chamber, mice are prepared rapidly prior to cercariae exposure. Each mouse is introduced into the unit posteriorly by sliding the tail along the ventral slit (Figure 2). A plastic locking device is inserted above the animal's head, adjusted to animal size and secured in place by the thumb screw (Figure 3). Chambered mice are held in a horizontal position. At the time of cercariae exposure the units are positioned vertically on a Berrios-Duran (1955) exposure board. Mice restrained vertically are rarely able to withdraw the tail from the cercariae suspension. An uninterrupted

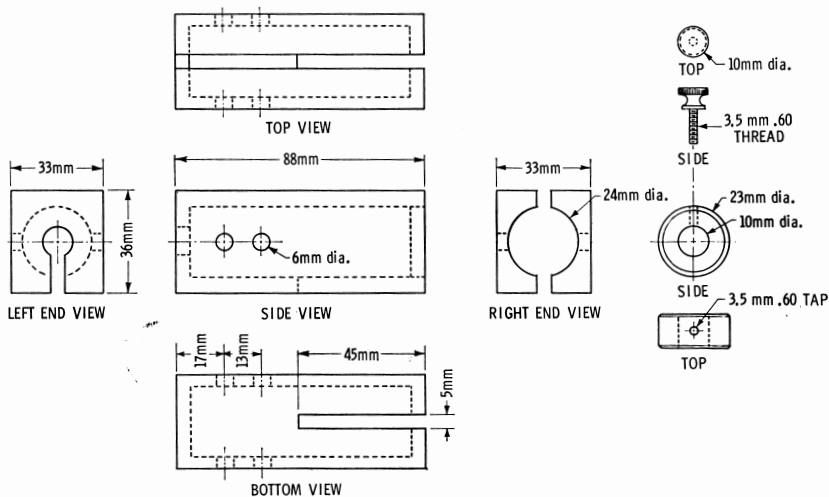


Figure 1. Line drawings of improved mouse restraining chamber.

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exposure time is maintained through use of the improved chamber. This chamber may be useful to restrain mice for tail vein injection or the withdrawal of blood.



Figure 2. Introduction of mouse into the restraining chamber.

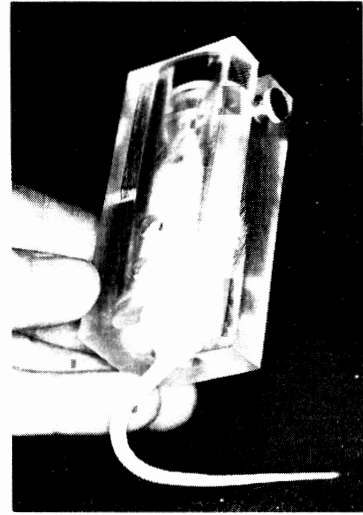


Figure 3. Mouse secured within restraining chamber.

Literature

- 1) Berrios-Duran, L. A. (1955): An efficient device for exposing mice to schistosome cercariae and holding small animals for post mortem examination. *J. Parasit.*, 41, 641-642.
- 2) Stirewalt, M. A. and Bronson, J. F. (1955): Description of a plastic mouse restraining case. *J. Parasit.*, 41, 328.