Sanborn Viso-Cardiette, Model 572-M. Tracings of a representative record for a single S on Trials 1 and 10 are shown in Fig. 2. The typical unconditioned response (UCR) was a complete suppression of respiration, often lasting several seconds. A reliable and unambiguous anticipatory conditioned response (CR) was obtained in all Ss following relatively few CS-UCS pairings (see Fig. 2).

The restraining device, in particular, should prove useful to researchers using classical conditioning procedures with fish. As well as minimizing competing responses, the restrainer provides an effective means for insuring the position of the fish with respect to a visual or auditory stimulus. The device has the practical advantage of being inexpensive and simple to construct.

REFERENCES

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NOTES

1. This report describes a technique employed in a thesis submitted by the senior author in partial fulfillment of the requirements for the M.A. degree in psychology at Connecticut College.
2. Now at Princeton University.

Two improvements for the Econo-Cage #110 metabolism unit¹

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The Econo-Cage metabolism unit is improved by replacing a breakable plastic rod which holds the feeder screen in place and by collecting feces on a removable screen instead of from the urine contaminated base.

An attractive new metabolism cage, the Econo-Cage No. 110 metabolism unit,² can be made more effective with two simple improvements. First, the "V" shaped food hopper cover incorporates a plastic rod designed to prevent the animal from pulling the cylindrical wire food-access unit into his living chamber. The plastic rod is easily broken by laboratory rats, allowing their escape through the food hopper. A 3-16 x 1½-in. screw with the nut placed inside the "V" (Fig. 1-A) replaces the plastic rod. Especially vigorous rodents may necessitate the use of adhesive tape wound around over the opening of the food hopper to hold the hopper cover in place.

Second, the collection of feces is implemented by the use of a one-piece removable screen unit with its surface 1 in. above the plastic base and with a 1¼-in. hole in the center to accommodate the urine receptacle (Fig. 1-B). The screen unit consists of two pieces of window screening, one circular with a diameter of 7½-in. and the other a 1-in. strip which is soldered to the edge of the first. The screen unit permits the removal of all feces at once, without scraping, and prevents contamination by urine which overflows from its receptacle onto the plastic base. The approximate 30-cc capacity of the urine receptacle is inadequate for daily measures of some small rodents such as *Neotoma micropus* which may urinate 120 cc in 24 h.

NOTES

1. This note is based on research supported by an NSF grant to Frank A. Logan.
2. Manufacturer: Maryland Plastics, Inc., 9 East 37th Street, New York, N. Y. 10016.

Fig. 1. Idealized view of metabolism unit showing screw and nut (A) which replace the plastic rod of the food hopper cover and the removable screen unit (B).