A simple rodent restraining cage*

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A squeeze cage restraining device to totally immobilize small rodents is described. It is designed for use in situations where confinement of an animal for short periods of time over a large number of sessions is necessary. The apparatus has the advantage of being easily modified for different sizes and weights of animals, as well as being relatively open and easily constructed.

In many types of physiological experiments making use of chronic electrodes, it is necessary to confine an animal for short periods of time over a number of sessions to make recordings from the electrodes. In situations either where excess movement of the animal may interfere with this recording (such as EKG records) or where precise specification of a stimulus is important (as in auditory threshold measurements), a device to totally immobilize the animal becomes necessary.

The squeeze cage restraining device

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Fig. 1. Squeeze cage restraining device. Note that one side is fixed while the other is movable and that rods are inserted to form the top and back of the cage.

shown in Fig. 1 was developed in our laboratory to meet both requirements mentioned above: Recordings were being made from chronic electrodes in the cochlea as well as from electrodes under the skin to record heart rate. The head of the animal needed to remain fixed to permit specification of the sound stimulus. In addition, experiments needed to be carried out over time on a large population of animals of varying size (250- to 1,200-g guinea pigs). An easily modified, relatively open, easily constructed device was needed.

As indicated in Fig. 1, the animal is simply placed in the device, the movable wall set in to hold the S, and the threaded rods inserted to form the top and back of the cage. Nuts are put on the rods to hold the sides together. The open top permits ready access to chronic electrodes or the holes in the sides can also be used. Plexiglas of 3/8-in. thickness has proved a good material, with pieces either screwed and/or glued together. Size can vary with the animal being used; the case shown is 12 in. long x 5 in. wide x 3 in. high.