A RESTRAINING DEVICE FOR CATS

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Cats often prove difficult to handle during painful procedures. Physically restricting the animal usually evokes severe emotional responses which endanger subject and experimenter. An unassisted person may find it difficult to give an intravenous injection or to insert and secure a rectal temperature probe.

Figure 1 shows an apparatus designed to assist in such tasks. The stall-like framework, of 1/2-in. plywood, is 12 in. high, 9 in. wide,

Fig. 1. Photograph of the apparatus showing a cat being given an intravenous injection. U, upper section of the Plexiglas form; L, lower section of the Plexiglas form; T, thumbscrew for securing the two sections together; H, height adjustment.

and 13 1/2 in. in depth. Wood was used as it provides better traction for the floor. On the front middle portion of this frame, a Plexiglas form, 1/4-in. thick, is attached to an aluminum base 1/8-in. thick, 2 3/8-in. wide and 5-in. high. The flexibility of the aluminum helps to absorb stress applied to the more brittle Plexiglas, which is prone to cracking. The height

can be adjusted by the use of thumb screws. The optimal height for our adult female cats is 7 1/4 in. from the floor base to the lower portion of the opening. The neck opening is an oval, 2 1/4-in. wide, formed by the conjunction of two Plexiglas sections. The stable lower piece is a half circle with an inverted keyhole space cut from the center. This allows the cat to insert its head into the wider, upper part and then slide its neck down into the lower space. The removable upper piece has a U-shaped cut-out. The sections can be locked together with thumb screws, making a pillory-like holder. A Plexiglas food dish is attached to the front at a convenient feeding height.

Once familiar with the surroundings and the experimenter, food deprived cats can quite easily be trained to the apparatus. Canned sardines, placed in the food dish, make an effective reinforcer. The apparatus is placed on the corner of a table to prevent the cat from reaching the food from the front and one side. On the other side is located a rotating wooden section (9 3/8 by 12 in.) which may be pivoted forward, blocking entry from that side. The cat therefore can reach the food only by entering the rear of the apparatus, moving up into the stall, and inserting its head into the lower Plexiglas piece. In one case it was necessary to use successive approximations to the final performance. The cat was reinforced at several places within the apparatus with the final criterion being insertion of the head and neck within the holder. Once this is accomplished, the upper piece is placed in position and secured. This effectively restrains the cat. The stall may then be moved to any convenient place on the table. The side piece may be rotated back against the frame to give better access to the foreleg.

Struggling usually occurs when the cat is first subjected to restraint, but this diminishes with further experience, since it can eat only

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when standing quietly. Some initial difficulty was experienced with one cat that struggled excessively. The animal pivoted around in the apparatus with great force. A Plexiglas bar with a small chain and swivel snap attached was then installed across the top of the wooden frame. The snap was fastened to the cat's harness (standard dog harness) and pivot-

ing prevented. This procedure is not often necessary.

Radial vein injections can be given to trained animals with a minimum of struggling, as shown in Fig. 1. Frequently the cat will continue to eat even when the vein is punctured. Rectal probe insertion is more disturbing but also is facilitated.