

present experiment recovered on diet IV in the absence of fat soluble vitamins, it would appear that these substances were not responsible for the protective effect of the above diets. The data suggests, therefore, either that "galactose paralysis" is due to a multiple deficiency developing when the various supplements were fed singly or that rations indicated above permitted the synthesis either by the animal's own tissues or its intesti-

nal flora of substances capable of preventing paralysis.

Summary. Rats fed a diet consisting of glucose and galactose developed a severe flaccid paralysis of the hind limbs. Addition of yeast or synthetic B vitamins to the above diet failed to prevent the appearance of paralysis, although recovery subsequently occurred in animals receiving yeast.

15499

An Improved Rabbit Holder.

ROBERT E. SHIPLEY.

From the Lilly Laboratory for Clinical Research, Indianapolis City Hospital, Indianapolis, Ind.

In studies requiring repeated injections into the ear veins of rabbits, accidental extravasation with subsequent loss of the vein occurs not infrequently even under the best conditions. With the use of the conventional box-like rabbit holder there is rarely suf-

ficient immobilization of the rabbit's head and ears to assure careful entry of the needle into the vein or to prevent its dislodgement by a sudden jerk of the animal's head.

Preliminary trials with a plaster mask shaped to accommodate the rabbit's head

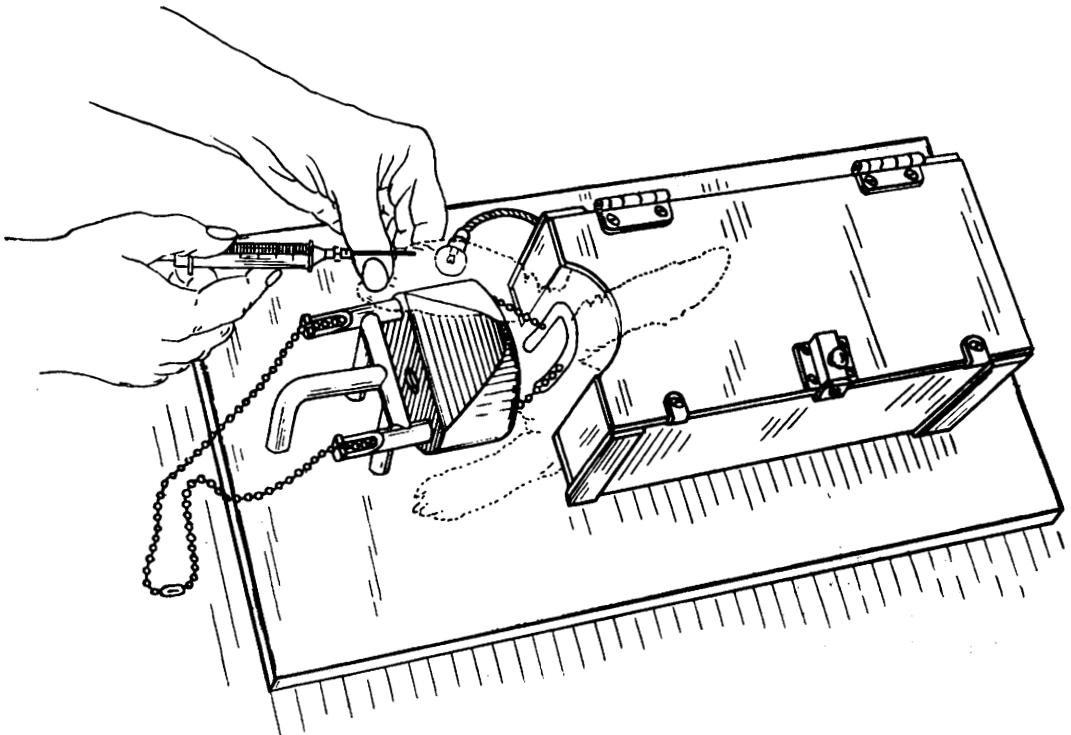


FIG. 1.

demonstrated that when the latter was rigidly supported the ears could be gently held and injected without mishap. After progressing through several models, a rabbit holder was designed according to the arrangement shown in Fig. 1, which aimed primarily at immobilization of the rabbit's head.

The head holder is made by molding a liquid thermo setting plastic* around a plaster of Paris model which has been shaped to conform to that of the head of a rabbit weighing about 2.5 kg. Provisions are made for leaving a hole from the nose to the outside. Within the 2 horizontal, tubular supports which are included in the plastic casting run two 3/16" ball chains 12 inches long. The anterior three-fourths of the rabbit's head is held in the cast by a horse-collar-shaped neckpiece to which are attached the ball chains. Once the rabbit's head is placed in the cast, the operator exerts traction on the chains, and under moderate tension the latter are secured by fitting them into 2 narrow vertical slots on the ends of the horizontal support tubes.

The body of the rabbit is confined in a 5" x 5" x 12" metal box with a hinged lid and clasp. Two flanges fastened to the front of the box prevent the rabbit's legs from reaching the area about the ears. All parts are mounted on a piece of 12" x 27"

x 3/4" plywood, the top and edges of which are covered with sheet metal 0.050" thick. For maximum rigidity, durability, and ease in cleaning, stainless steel, chrome-plated brass, and plastic were used. Wood and plaster of Paris are less durable but are otherwise adequate.

It has been found that by transilluminating the rabbit's ear from below, locating and visualizing particularly the smaller veins is greatly facilitated. With this procedure it is rarely necessary to clip or shave the hair over the vein in preparation for injection. A flexible arm with a small socket and bulb attached may be brought into any desired position beneath either ear.

The apparatus has been used several thousand times and has proved very satisfactory for rabbits weighing from 1.5 to 4 kg. Confining the rabbit in the holder causes no apparent discomfort.

Summary. A device is described which has been found to be of great advantage in effectively holding rabbits and immobilizing their ears for bleeding or injection procedures. The significant feature of the apparatus is a mask, shaped to accommodate the anterior three-fourths of the rabbit's head. An inverted, U-shaped collar holds the head firmly in the mask so that the position of the ears is correspondingly stabilized.

* "Catavar 101" (cream colored) or "Catavar 1001" (clear), Catalin Corporation of America, New York, N.Y. Plaster of Paris may also be used.

Acknowledgment is made to Mr. Clifford Wilson and to Mr. Roland Parker for suggestions in design.

15500

Retromammillary Inhibition of Cortically Induced Movement.

R. RHINES AND H. W. MAGOUN.

*From the Department of Anatomy, Northwestern University Medical School.**

Recent investigation has revealed 3 regions of the brain whose stimulation inhibits the response evoked from the motor cortex: cortical area 4-S,¹ the caudate nucleus,² and

the bulbar reticular formation.³

¹ Dusser de Barrenne, J. G., and McCulloch, W. S., *J. Neurophysiol.*, 1941, **4**, 311.

² Mettler, F. A., Ades, H. W., Lipman, E., and Culler, E. A., *Arch. Neurol. Psychiat.*, 1939, **41**, 984.

³ Magoun, H. W., and Rhines, R., *J. Neurophysiol.*, 1946, **9**, 165.

* Aided by a grant from the National Foundation for Infantile Paralysis, Inc.