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## AN IMPROVED DROP TRAP MECHANISM

By MARIE V. BEALS

Most banders who use a drop trap employ the type with a prop release or folding trip stick. This gives no control over the falling trap after a pull of the string snatches the support from the open side of the trap. Even with the greatest of care in using the pull string drop traps, occasionally a bird is killed. When the stick is pulled, the snap of the stick alarms the bird and in trying to escape it might be caught under the edge of the trap.

After experimenting with several plans, I have adopted the method shown in the photographs which is a distinct improvement over the old type. This consists of a heavy cord fastened to the center of the open side of the trap (see photograph no. 1). The cord is put up and over a three inch pulley (A) which is supported at a height of three feet from the ground on a one inch iron pipe driven into the ground to a depth of about three feet. The cord (C) goes from the pulley to the control window, through a hole in the lower part of the window frame, over a small pulley (see photograph no. 2) and is then fastened to a short length of sprocket chain. From the control window the drop trap is raised to the proper height and a link of the sprocket chain is placed over a stout pin of suitable diameter driven into the wall board below the window.

When a bird has entered the trap and is near the pan of water (pan put in the center of the trap) the sprocket link is removed from the pin and as the operator now has control of the trap, it can be lowered without much apparent movement so that the bird is not alarmed. Often the bird does not realize that it is caught and will continue to feed or bathe while the birds feeding near the trap that was lowered are not disturbed. Sometimes a bird, even though it may be near the pan of water, will attempt to fly under the falling edges of the trap, but now the operator has control of the trap so that it can be kept raised and the bird escapes with its life.

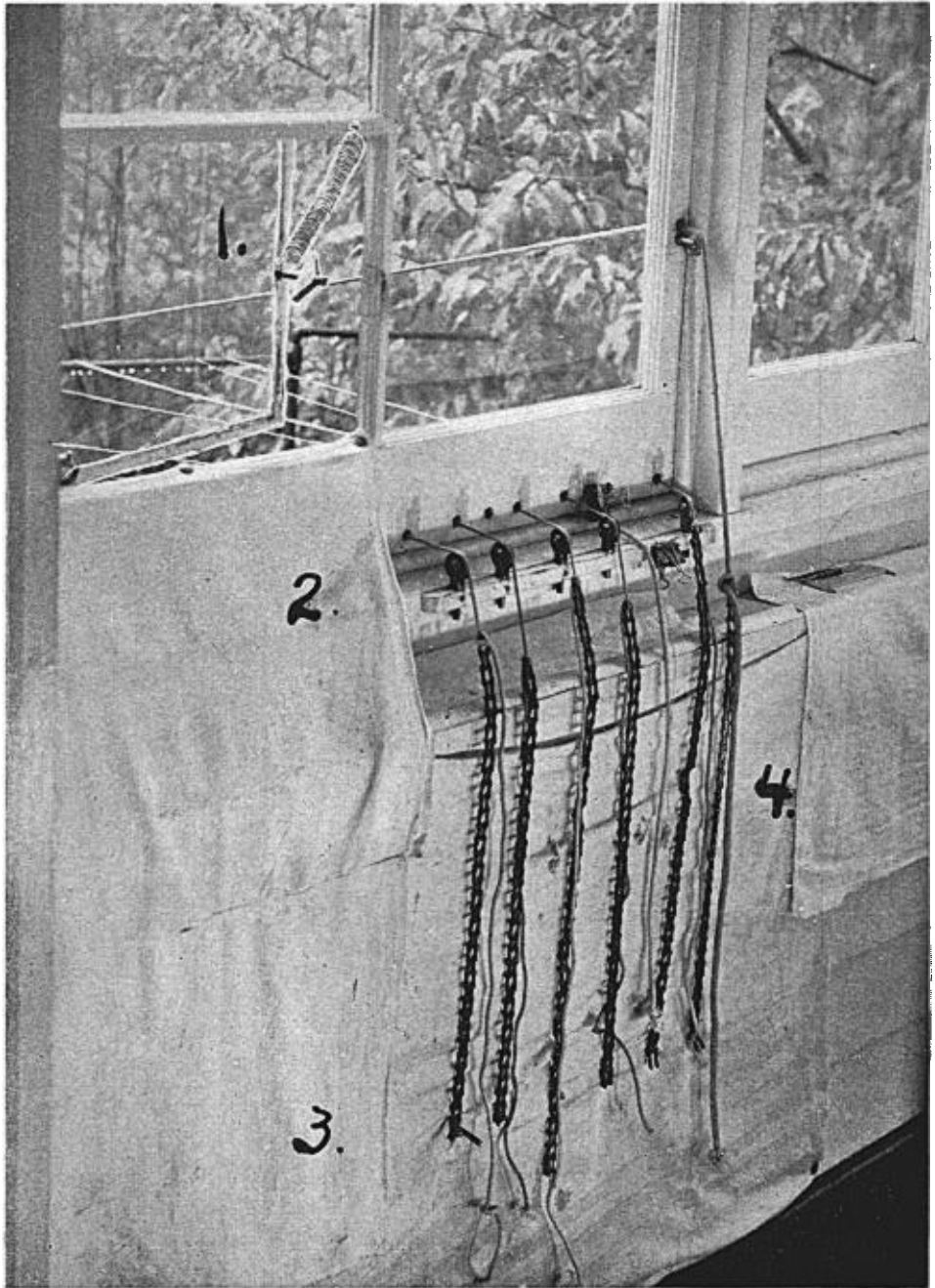
From 1929 to 1933 I caught 2200 birds in folding trip stick type drop traps. During this time nine birds were killed because of the uncontrolled action of the traps. In 1934 I changed the mechanism of the drop traps to the controlled method described. From 1934 to 1938 inclusive, 6000 birds were captured in the controlled drop traps without a single fatality.

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PHOTOGRAPH No. 1

- A—Pulley      B—Support for pulley      C—String to control window  
 D—Hinge of drop trap      E—Water drip tube



PHOTOGRAPH No. 2

1—Spring and catch on release window  
3—Fastening pin

2—Pulleys for strings  
4—Sprocket chain