

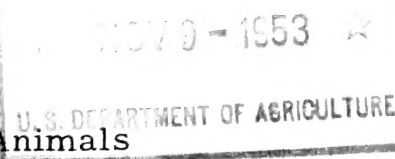
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United States Department of Agriculture
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine

A HOMEMADE FLY TRAP

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A fly trap made of wood and wire screening has been designed for those who desire to construct their own. Soft wood that does not split easily, such as redwood or white pine, is best. The screen should be of Monel, bronze, or copper, and the hardware of nonrusting material.

The materials required are a piece of 24-inch screening 10 feet 4 inches long, the hardware listed on page 2, two pieces of 1 by 4 lumber 10 feet long, and 30 feet of 3/4-inch screen-door molding. One of these boards is ripped slightly off center to make two different widths, which are then cut into eight uprights. About 70 inches of the second board is cut off, ripped into two strips of equal width, and made into eight horizontals. The remainder of this second board is sufficient for ripping the 1- and 1/2-inch strips needed. It is advisable to give all pieces of wood two coats of waterproof paint before assembling them.

Four identical side panels, like the one shown in figure 1, are first assembled, the lower crosspieces being 4 inches above the lower ends of the uprights. Half-lap joints are used held together with 2d nails. Screening is tacked to the inside of the frame, and the edges are covered with molding. The four panels are then fastened together with screws. An 18- by 18-inch frame with screening is then screwed to the top edge of the cage, and the cone is constructed and installed.

The cone is made from one piece of screening. A pattern should be first made of paper (fig. 2). A semicircle is drawn with a radius of 22 inches, and radii are drawn from the center to points on the circumference 15 inches apart, making four equal triangles. A 1/2-inch lap is left along one margin. When the screening has been cut to the desired shape, it is rolled into a cone and the lap is soldered to the opposite edge. The screening may be held in position for soldering by tacking it lightly to the edge of a 1 by 4. Although soldering is preferred, the edges can be either laced together with copper wire or nailed to a strip of wood.

The four pieces for the cone frame are nailed together to form a square. Then the screening is tacked to the inside of the frame, and the edges are covered with screen-door molding. The apex of the cone is cut off to leave an opening about 1 inch in diameter. The cone is slipped into position and fastened with L-head screws (fig. 3), or it may be held in place by means of two small turn buttons if preferred.

A good bait pan to use with a trap of this size is one 14 inches wide and 4 1/2 inches high. Granite-covered iron is very durable if handled carefully so that the granite is not broken. The pan should fit loosely inside the cone frame and extend 1/2 inch above the bottom edge of the trap.

The bait to use depends upon the kind of fly to be trapped. For blow flies an excellent attractant is 2 pounds of beef liver in 1 gallon of water. For house flies 2 pounds of brown sugar, or 1 pint of cane molasses, in 1 gallon of water may be used. After several days' fermentation the bait becomes more attractive.

Best results are obtained when the trap is installed in the open with no tree branches or other obstructions directly above it (fig. 4). Partial shade does not harm the catch materially in hot weather, but in cold weather the trap should be placed out of the wind but exposed to sunlight.

Materials

<u>Number</u>		<u>Size</u>
4	Uprights for panel frame	2 1/16 x 3/4 x 28
4	do	1 5/16 x 3/4 x 28
8	Horizontals for panel frame	1 11/16 x 3/4 x 17 1/4
4	Frame for top	1/2 x 3/4 x 17 1/4
4	Frame for cone	1 x 3/4 x 15 5/8
8	Molding for panel, verticals	20 1/2 inches long
4	Molding for panel, horizontals	15 1/2 inches long
4	Molding for cone	14 5/8 inches long
4	Screening (sides)	15 1/2 x 22
1	Screening (top)	18 x 18
1	Screening (cone)	24 x 44
1	1/4-lb. box of wire nails (for molding)	3/4 x 18
4	Cement-coated nails for cone frame	6d
80	Galvanized nails for lap joints	2d
1	1/4-lb. box of canvas tacks	
16	Flat-headed wood screws for panels	1 1/2 x 8
8	Flat-headed wood screws for top	1 1/4 x 7
2	L-head screws	2 inches long
	String solder, rosin core	

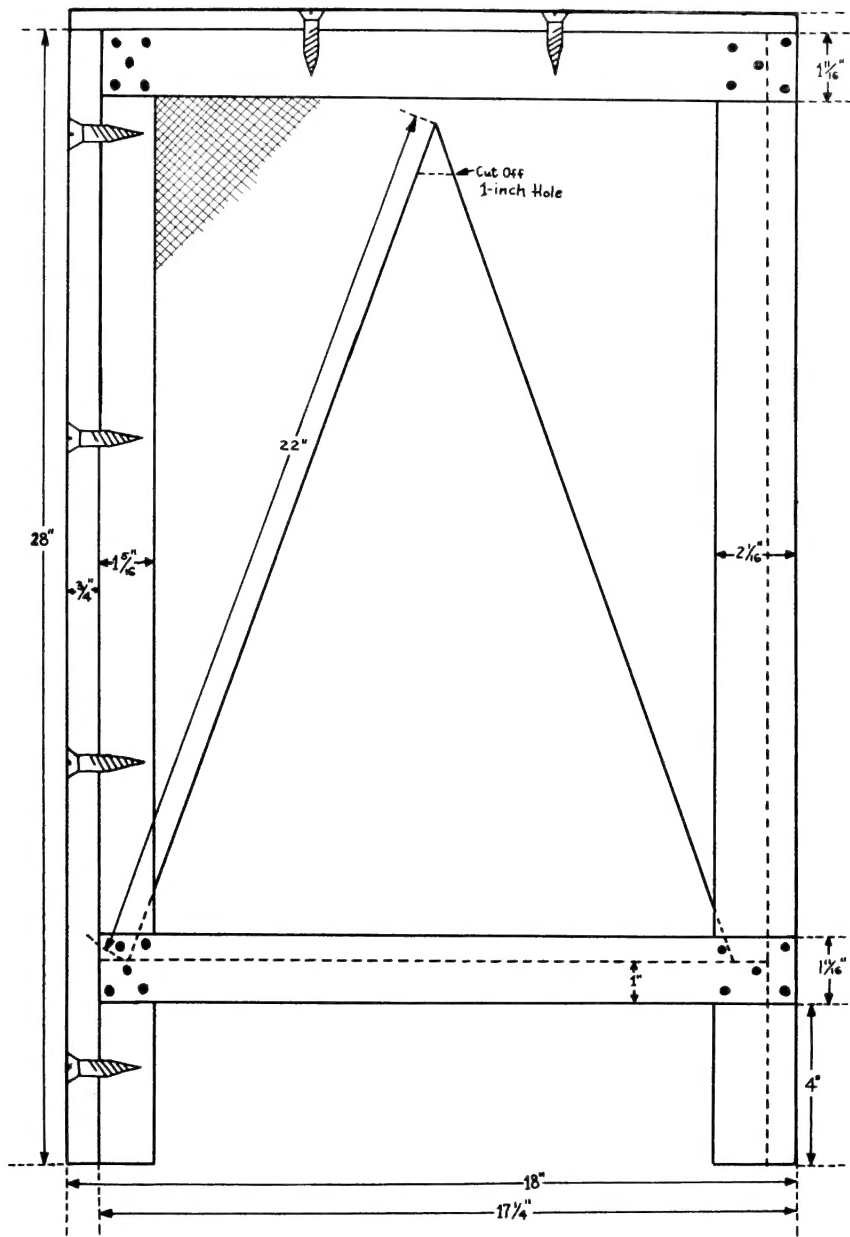


Figure 1.--Side panel of fly trap.

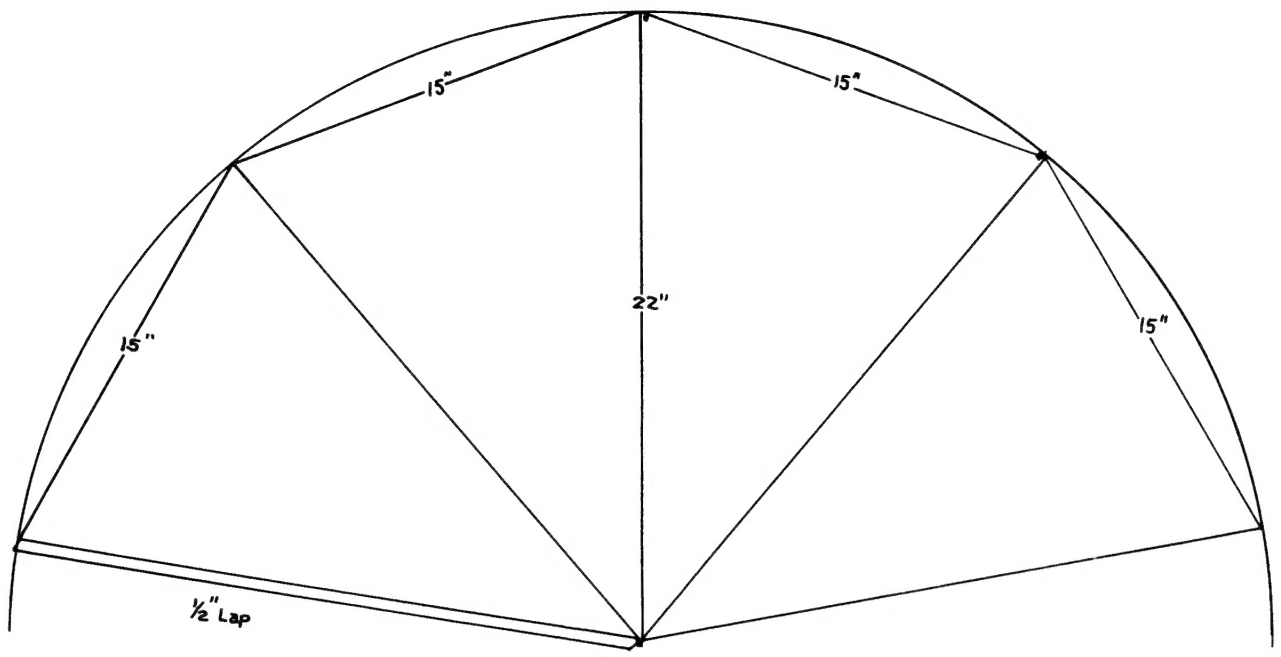


Figure 2.--Pattern for screen cone.

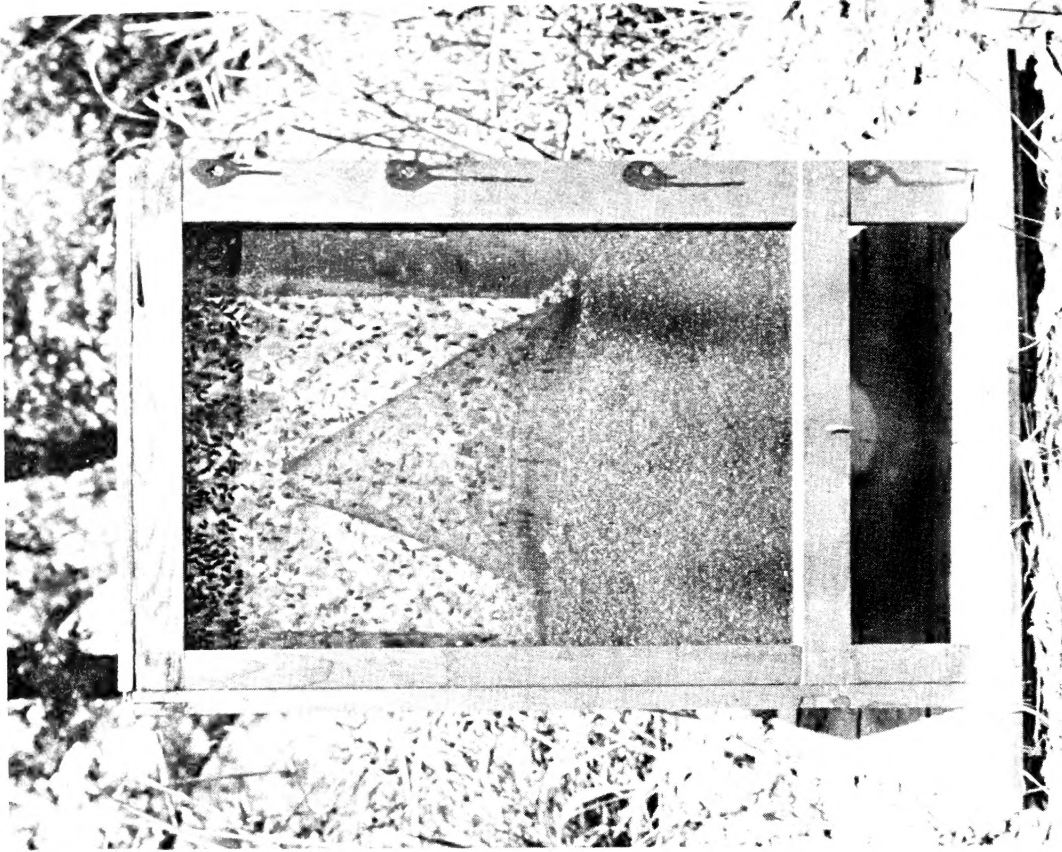


Figure 4. -- Fly trap in operation.

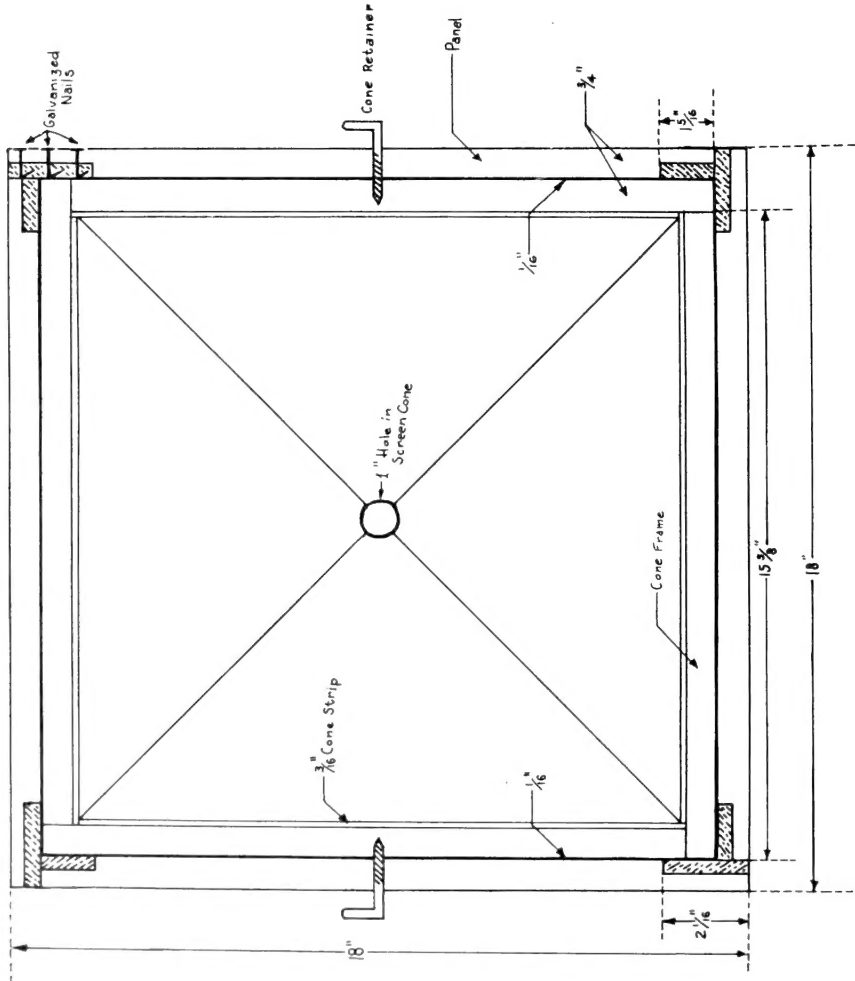


Figure 3. -- Top view of fly trap.