Maine Agency Draws Plans For Shrimp Traps

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Method Gains Favor With Lobstermen

Maine fishermen began to use traps for harvesting shrimp during the 1969-70 fishing season. Since that time, interest has grown throughout the coastal areas.

This paper, in response to many requests received by the Dept. of Sea and Shore Fisheries, presents the basic means of building a trap and illustrates all commercial types presently available in the State of Maine. Use of trade names does not imply endorsement of commercial products.

Two types of traps are presented here in step-by-step sequence of construction, to provide basic ideas for Maine fishermen. Neither of these double-headed traps has been fished commercially or experimentally.

They are, however, similar in design to the single-headed commercial type trap. Celebrated Maine "Yankee Ingenuity" will gradually change these until the best fishing trap is found.

One of these is an all-wire trap which requires some special tools for construction. The other uses half-round pot stock and wire but is built with tools familiar to all fishermen. Both traps are shown with double heads.

They, of course, can easily be built with a single head (see procedure for half-round trap) if preferred.

ABOUT THE AUTHORS

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Directions for construction of traps were developed by Martin Brewer, Sea and Shore Fisheries. The investigation of commercially available traps was conducted by Afton Farrin and Donald Nelson, Sea and Shore Fisheries.

Where To Get Materials

Most of the materials mentioned in this article are available from normal suppliers of lobster trap components, marine dealers or hardware stores. However, a few of the items may prompt questions, so some of the sources are mentioned below. Further questions should be directed to the Marine Fisheries Extension Service, Sea & Shore Fisheries, Augusta, Me.

Hog rings are small wire rings such as farmers use to clip on the ears of their hogs. Similar rings are used on car seat upholstery.

Aluminized wire is available from Applied Oceanics Ltd., P.O. Box 457, Bath, Me. 04530.

Brewer trap is of the general design of Leslie Brewer of Southport, Me., and sold in its commercial version by Applied Oceanics Ltd., address above.

Court trap is of the general design of Rusty Court, Monhegan, Me., with materials available from Coastal Net Co., Warren, Me.

Marcraft trap similar to the Brewer trap, is also built of aluminized wire and is available from Marcraft Inc., Flying Point, Freeport, Me.

COMMERCIAL TRAPS

Two types of traps have been used commercially (head).

with apparent success. The more commonly used Brewer trap is rectangular, with a single top entrance

The Court trap is made of wire webbing over standard, half-round pot stock with sardine twine heads. Certain innovations have been made

Building The Half-Round Trap

Drawing at right shows assembly of the half-round trap, overall size 30" x 24" x 16". Choice of a double or single head opening is offered. Tools required are as follows: hammer, wire snips, bending brake or jig for bending wire.

Materials needed are:	Present Cost
Pot stock for 2-bow frame 24" x 30"	$1.50
7' 10" of 30" 16 ga. aluminized wire, ½" mesh	$5.00
Hog rings and pliers	
Ballast as for lobster trap	

Total Labor: 2 — 3 man hours.

1. Snip out base, for double (2) or single (2A) head opening, and bend where indicated. Lay it across runners spaced 18½" apart.

2. Put bows and sills together, slip sill ends into slots in the base and nail to runners. Make sure base wire is tight across bottom of trap, then put in ballast bars, inside and outside laths.

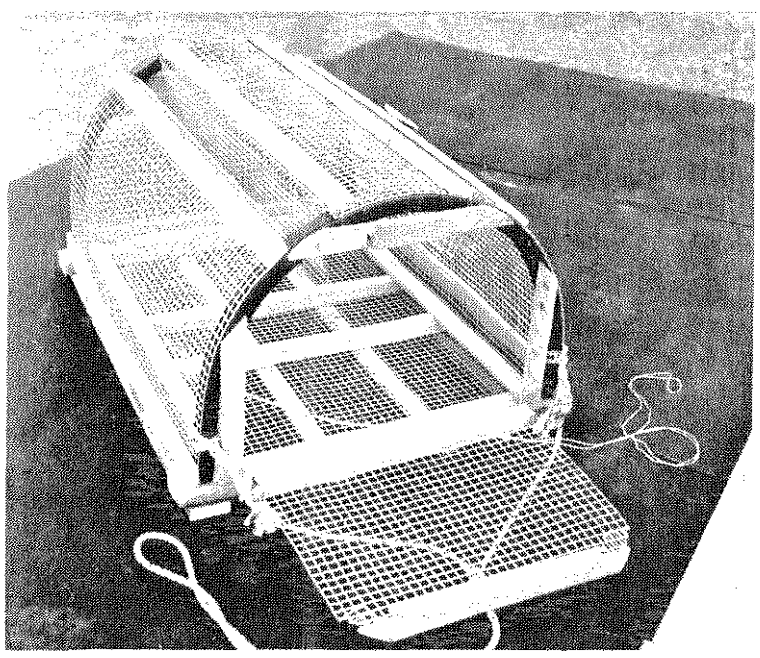
3. Nail laths in place on side of trap, bending wire to fit the bow. Snip out top (if needed), end, and door. Snip inside screen from remaining scrap and secure in place with hog rings.

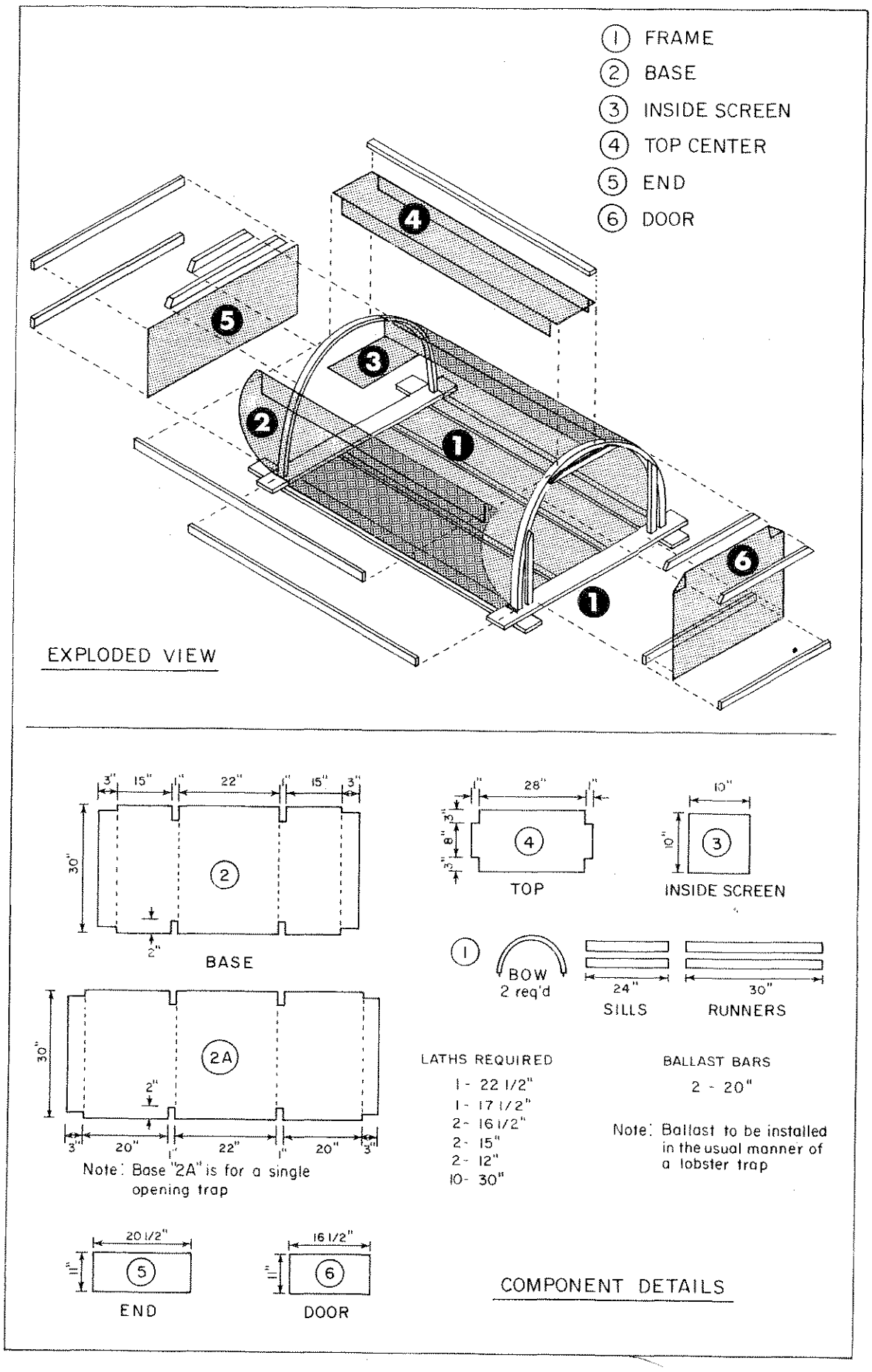
4. If single opening head used, omit this step. Bend top and nail in place with laths, making sure openings are the same size on both sides.

5. End wire is nailed to bows with lath strips. Two short laths are nailed above wire less than ½" apart. All laths may be used on closed end if desired.

6. Top corners of door wire are bent down to clear the bow. Laths are nailed on both sides, top and bottom of door. Inside top lath must clear inside of bow. Short laths attach to each side of door, leaving enough room at bow-sill corner to tie on bridles. Door is attached to sill at bottom with leather. Lath and button are attached above door.

Completed trap with double head opening can be seen below.





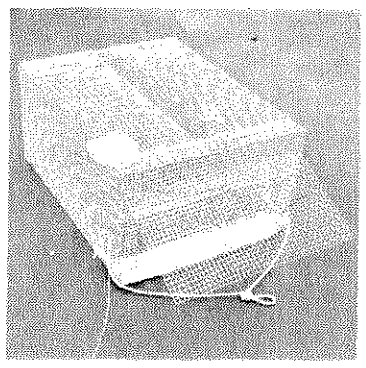


FIG. A. Oblique top view of the Brewer trap. Note the single, longitudinal top entrance; front and rear ballast with a bait ring anchored in the latter; and the opened front door.

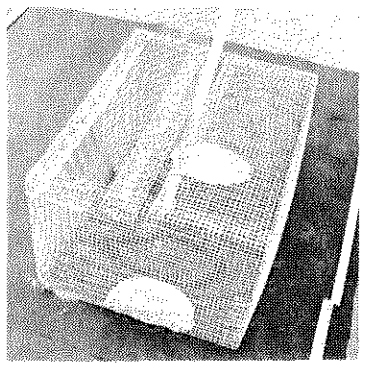


FIG. B. Top-front view of trap. A board has temporarily been placed through the entrance immediately behind the free-swinging gate. The above completed retail trap would have a bridle, bait strings and door strings.

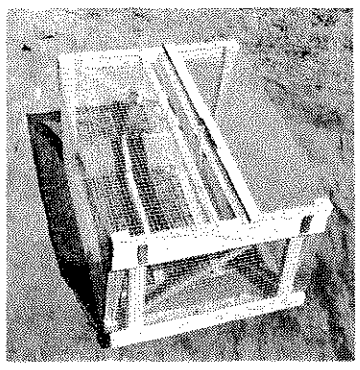


FIG. C. Wood-frame trap with top, tapered wood entrance and large, front door (at bottom of photograph).

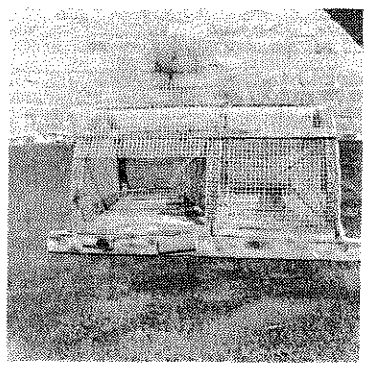


FIG. D. Side view of Court trap showing two herring twine heads and opened rear parlor.

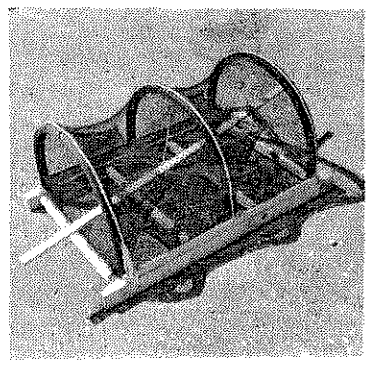


FIG. E. Modified trap. For illustrative purposes a 1"x2" board is inserted from the front head (on left), through the parlor head and out the rear door (on right). The ballast and the three (or more) outer protective laths have yet to be added to the above trap.

by each manufacturer, and will be indicated below. All dimensions are given in inches.

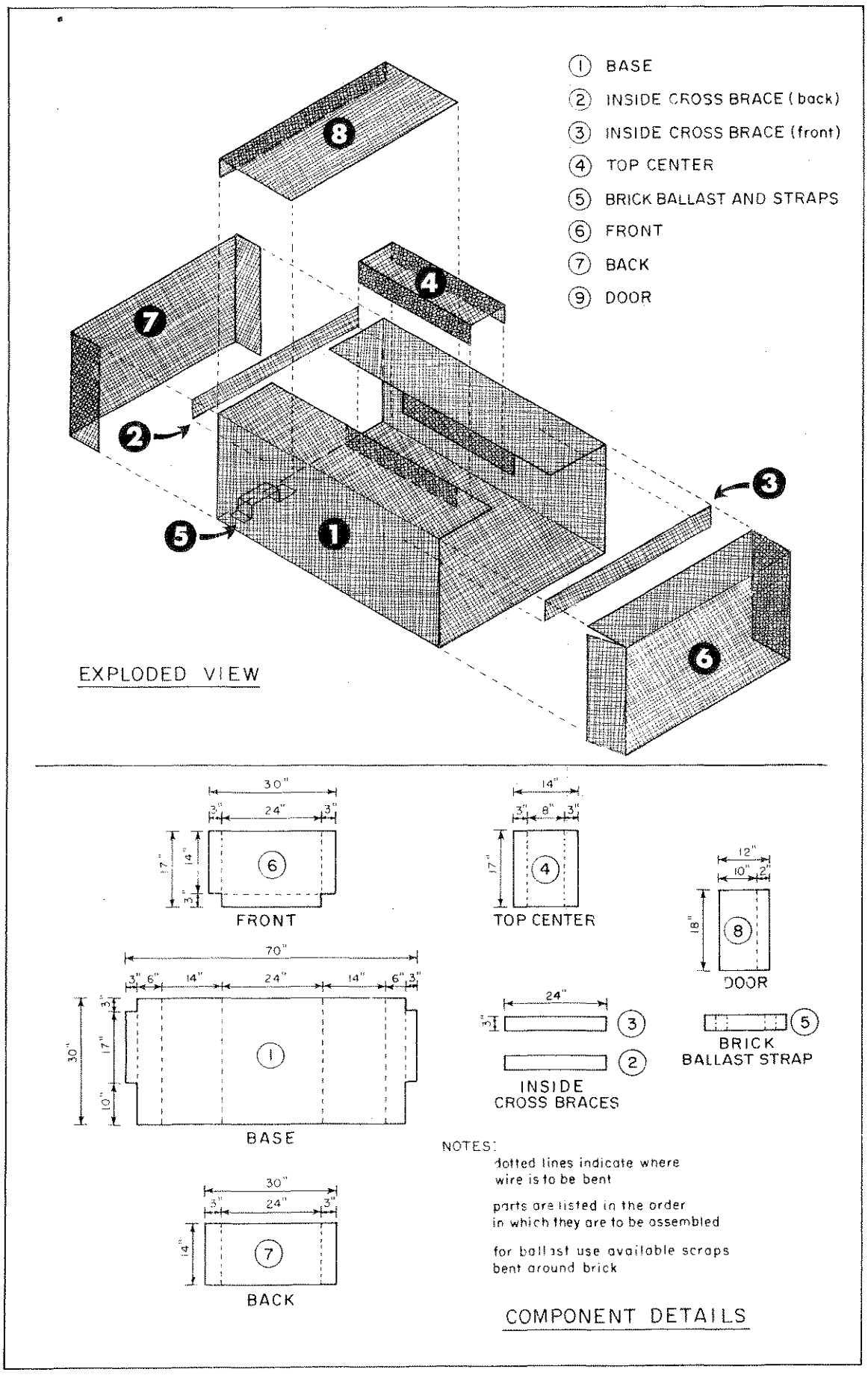
A variety of models similar to the Brewer trap are available on the open market. Fig. A offers an opened view of this basic trap. Overall size is 15½" x 24" x 30"; materials are 16 ga. aluminized ½" mesh welded steel wire; concrete ballast; hog ring bindings; head opening is 2" x 24", and door is 7½" x 20".

A similar trap is also available which offers a hanging door to prevent escaping shrimp while the trap is being hauled (Fig. B). Overall size is 18" x 24" x 30"; materials are 16 ga. aluminized ½" mesh welded steel wire; concrete ballast; hog ring bindings; head opening is 3" x 26", and door is 6" x 26".

The same design is also available with a wooden frame. Fig. C shows this trap which uses hardware cloth in place of aluminized wire. Overall size is 18" x 24" x 30"; materials are 18 ga. galvanized ½" mesh wire; 1" x 2" spruce strapping; concrete ballast; head opening is 3" x 28", and door is 14" x 20".

There are currently only two Court traps commercially available. Fig. D shows the Court trap as designed. Overall size is 16" x 24" x 30"; materials are sills, slats and laths; 16 ga. aluminized wire; concrete ballast; 7/7" mesh sardine netting; head opening is 1" x 12", and door is 9" x 16".

A modified Court trap is shown in Fig. E, where sardine twine is used in place of aluminized wire. Characteristics of the trap are the same as above, but the price is substantially reduced.



Building The Square Trap

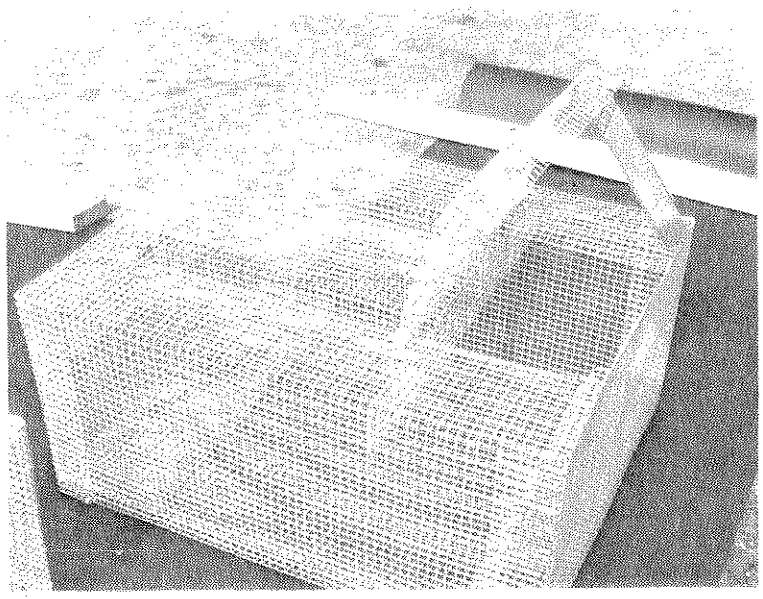
Figure at left shows assembly of the square trap, overall size 30" x 24" x 14". Tools required are as follows: wire snips (airplane snips), diagonal wire cutters, bending brake or jig for bending wire, small flat jaw, vise grips (jaw width less than ½").

Materials needed are:	Present Cost
12'30" ga. aluminized wire, ½" mesh	$7.80
Hog rings and special pliers	
Aluminum clip rings and special pliers	
2 bricks	

Total Labor: 3 — 4 man hours.

1. Snip out base and cross braces as detailed for half-round trap.
2. Bend the base into shape, secure cross braces with vise grips and apply aluminum clip rings to hold brace in place.
3. Make sure head opening is square, and apply second brace. Clip into place with aluminum rings.
4. The top center is now cut out with snips (clean edges of wire with diagonals) bent and placed in the top opening to form the double heads. Once in place and aligned, clip into place with aluminum clips and hog rings.
5. Brick ballast is now secured to the base with scraps using hog rings.
6. Front, back, and door are now snipped out and bent into shape. The front is attached with clips and rings, making sure the meshes line up.
7. Attach the back with clips, again aligning the meshes. It might be necessary to use both vise grips and a large screw driver to hold the mesh while applying the clips.
8. The door is attached along the same line as the inside cross brace, slips should be attached slightly loose to permit free movement of the door.
9. Wire or wood may be used to make "buttons" for securing the door, bait line, etc.

Completed trap with double head opening can be seen below.



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