

TRAP CONSTRUCTION WORKSHOP SESSION  
Reported by Albert Schnitzer

At the EBBA annual meeting at Ocean City on April 24, 1965, there was a workshop session on the construction of traps, conducted by Dr. Franklin McCamey. Dr. McCamey had laid out a variety of traps in various stages of completion, and tools and raw materials which he uses.

He built his lecture around the parts required for a chickadee trap of his own design since the workshop manual that had been distributed at the meeting carried an article on this subject. Dr. McCamey pointed out, however, that the purpose of the session was not to teach the design of any particular trap, but rather to teach what he considers the three basic skills, that is the bending, soldering, and cutting of the raw materials.

#### CUTTING

The wire cloth used by Dr. McCamey is either 1/2 x 1" of 16 gauge wire or 1/2 x 1/2" of 19 gauge wire. He cut a length of this cloth with snips and with diagonal clippers. As most of us have painfully learned, this created sharp edges. He dressed down the sharp edges with a grinding wheel attached to a 1/4" drill. This did a reasonably satisfactory job of smoothing off the worst edges; but, he demonstrated that it was far less laborious and enormously more satisfactory to cut the cloth with a portable power saw using a steel-cutting blade such as the Kronedge blade obtainable from Montgomery Ward. Cut thus, the edges needed almost no grinding to achieve a superior job.

Once a pilot trap has been made, Dr. McCamey pointed out, it is sensible when cutting each part to make it large enough for two or more traps and to cut the resultant piece down to several pieces of the proper size each for a single trap.

When cutting the cloth, he finds that he gets the smoothest and most expeditious job by anchoring down the ends of the cloth to his table with C-clamps.

#### CLOTH BENDING

Before bending a piece of cloth, Dr. McCamey marks the bending line with a red crayon. This line is laid along the outer corner of a length of angle iron which has been clamped to the edge of a table. The cloth is then tapped around the angle with a hammer, thus forming a sharp, straight, right angled bend. All four sides of the trap body are thus formed from a single length of cloth so that only one seam need be soldered.

When the sides of the trap have thus been completed, he solders on the top which has previously been prepared and smoothed to proper size.

#### SOLDERING

After lining up the joint to be soldered, Dr. McCamey holds the joint closed and steady with alligator clips. He uses tinner's flux which he applies with a paint brush. This flux is a liquid which is highly water soluble and which must be washed off thoroughly to prevent the area of application from rusting.

The iron, he says emphatically, must be large, 200 watts or more, heated by electricity, and preferably fitted with a thermostat since an overheated iron will burn off the flux. The tip of the iron must be properly tinned, without any black charred mass. Best results in tinning the tip will be obtained by heating just barely enough to melt the solder. The tinning technique, he says, must be learned as it is essential. He does not like gun type solder irons as he finds they do not become hot enough.

He uses solid wire solder, not acid core. The greater the tin content of the solder, the better the results he obtains. The poorest acceptable grade, he says, is at least 50-50 tin-lead.

He points out that the solder will stick only where the flux has been painted on. After soldering he lets the jointed edge set until the solder turns dull colored.

#### LOOP BENDING

For the triggers, treadle supports, treadle arms, and other parts where wire is required, Dr. McCamey uses #12 soft steel galvanized wire. This comes in reels so that the cut lengths must be straightened. He does this by tapping the wire with a hammer while he rolls the wire on a flat steel plate. The plate he used at the demonstration was a short length of 8" I-beam.

He bends the loops and eyes for the pivot joints on a bending board. This is a heavy piece of 2" lumber into which he has driven a bolt spaced close to an 8d nail. The bolt is of the same diameter as the eye of the loop and the distance from the bolt to the nail is just sufficient to allow a snug fit for the #12 wire. He pre-drills the holes which will receive the bolt and the nail in order to get them aligned precisely. The loop is bent around the bolt, using the nail as a steady rest. The method of forming the loop is nicely illustrated in the article in the manual. To form the completed eyelet, he sets a copper disc over the loop, applies the flux, and solders the disc in place. He then drills the copper disc with the proper size hole to make a snug fit.

An eye thus formed permits a frozen joint, in winter, to be freed readily by working it back and forth a couple of times.

He hammers out the copper discs with an arch punch out of a piece of copper sheet.

REMAINING PARTS

He now makes the blank doors, treadle assemblies and door guides using jigs of a block of wood with a hole drilled at the proper distance from the edge. After inserting an end of his wire into the hole, he folds the length of wire down over the edge of the block of wood, thus quickly forming three sides of a rectangle.

He now attaches the guides for the doors and solders the guides in place using enough clearance so that a fast moving chickadee (who ever heard of a slow moving one) that gets trapped under the descending door will not be decapitated.

He makes a supply of pivots, using the dimensions shown in the workshop manual. Both treadle and door must be in balance so as to remain in whatever position they are set. This is achieved by adding solder to the lighter of the two until perfect balance is developed. The trigger which keeps the door from jiggling loose when the trap is unattended is illustrated in the manual.

Dr. McCamey said that he likes a cover over the bait pan as this will permit birds to take the seed but not waste it by stirring it up with their wings or feet. He makes the pan of zinc sheet which he says he obtains from Sears. To permit the pan to drain, he perforates it with a 1/4" drill.

The handle at the side, as shown in the manual, permits two traps to be carried in one hand. He paints the finished trap, not as a rust preventive but because he suspects the birds can see the bait inside a painted trap more readily. He uses black paint of the type which comes in a pressure can.

In response to some of his audience's questions, Dr. McCamey said that he prefers not to have a bottom to his traps so as to permit a frantic squirrel to escape when it rolls the trap over before they make a mess of his trap mechanism. He grants that the bottomless construction requires braces, and that the trap cannot be used as a gathering cage.

In response to other questions, Dr. McCamey said that the cost of all the tools involved should not be more than \$75, but that power tools were not absolutely necessary to construct good traps. The blade of his portable saw, he believed, cost about \$2.50. He felt the trigger mechanism of his trap is superior to the usual Potter trap type where the door must first be raised slightly in order to become free to drop.

This reporter felt that the entire discussion was spirited, interesting, direct and to the point, and fast moving.

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