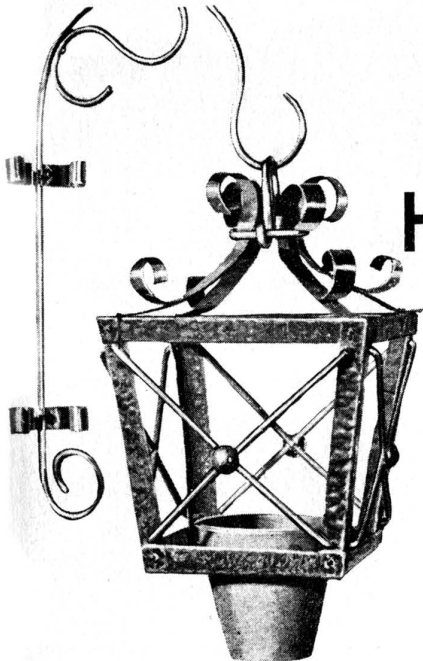
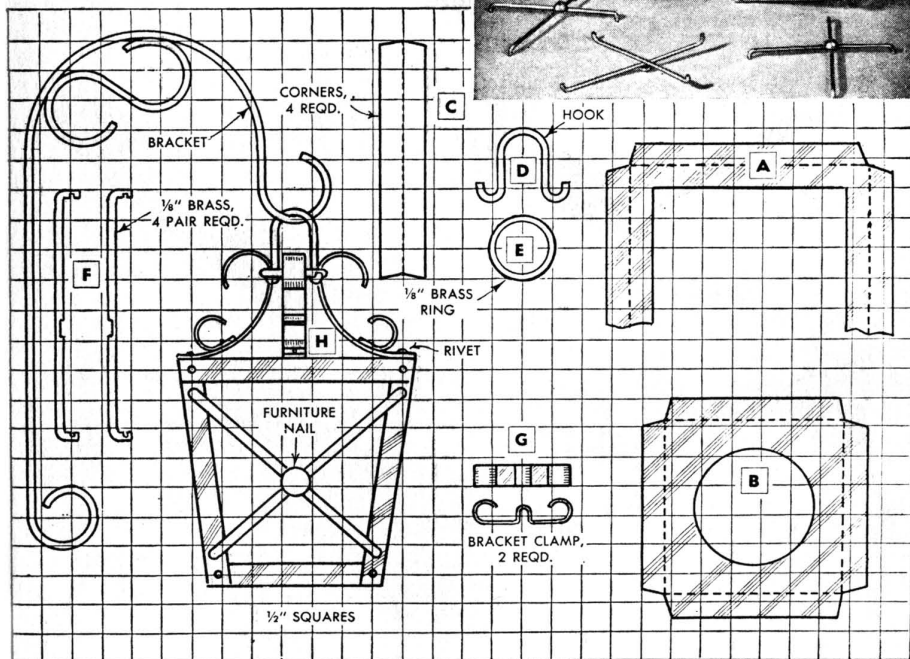
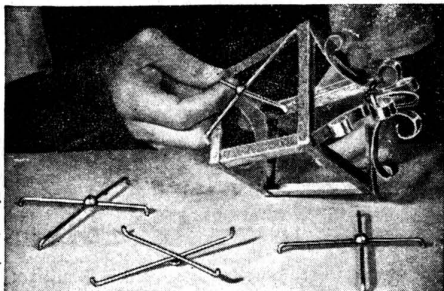
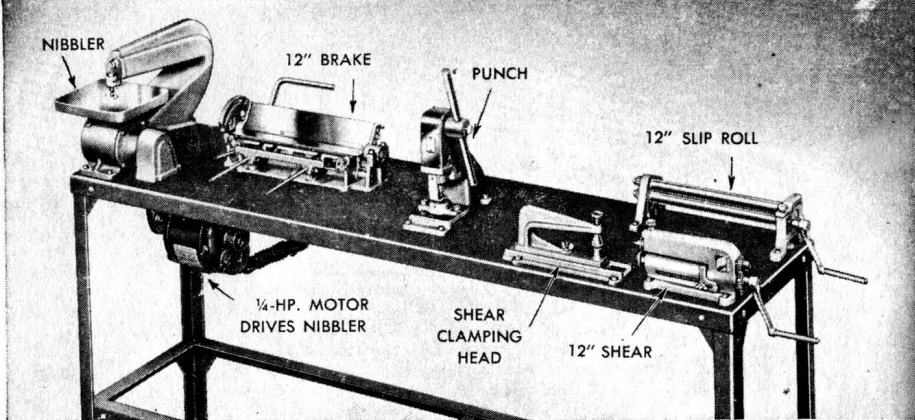


ART METAL HAMMERING



Plant Holder





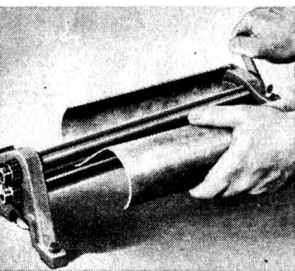
A sheet-metal shop mounted on a single bench. This outfit will bend, cut and punch out metal up to 20-gauge thickness

purchase a wooden mold; then use a mallet to drive the sheet metal into the mold. In the expert class, the metal is formed externally over various shapes of stakes or anvils. You can buy a 30-piece art-metal kit including chasing hammer, several pliers, files, snips, gas blowpipe, gravers, clamps, tweezers, soldering iron, hand scrollsaw, etc., for about \$25.

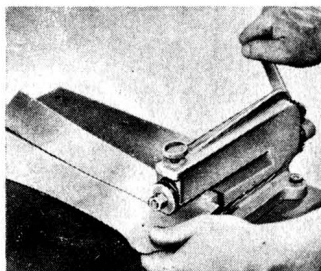
The **brake** is the most important piece of sheet-metal equipment, and is used for angular bending; the **slip roll** forms cylinders and cones; the **shear** does straight or curved cutting and, equipped with a clamping (pivot) head, it will cut perfect circles; the **punch** makes holes from $\frac{1}{8}$ to $\frac{1}{2}$ in. and, with suitable dies, will also do vee and square notching. The only power tool in the group is the **nibbler**. The nibbler resembles the hand punch except it makes a series of holes instead of a single hole, and in this way does cutout work. Drilling and cutting jobs may require a drill press and metal-cutting bandsaw.



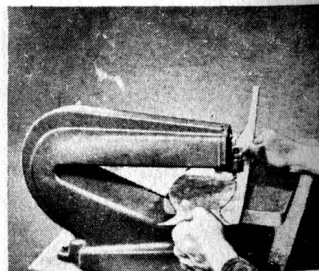
The brake is the principal sheet-metal tool. The unit shown here will handle sheet metal of 20-gauge thickness and up to 12 in. wide



SLIP ROLL



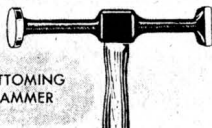
SHEAR



NIBBLER



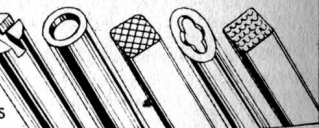
RAISING HAMMER



BOTTOMING HAMMER



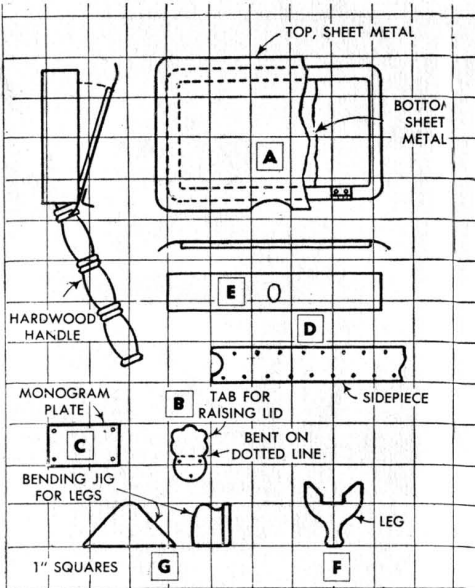
CHASING TOOLS AND STAMPS



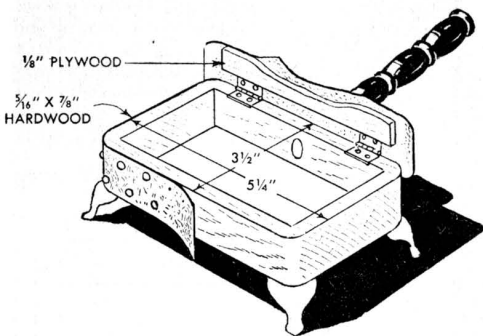
CONSIDERING the original investment in time and money, there are few crafts that offer finished products of more value and beauty than items made from hammered sheet metal. The plant holder pictured on the opposite page takes its lines from the old-fashioned carriage lamp, and is exceptionally attractive when made of brass. The silent-butler cigarette box, below, and the combination coaster rack and napkin holder on the next page are ideal in either aluminum, copper or brass.

None of the three projects requires a considerable amount of sheet metal, and the gauge used is not important—just so it is heavy enough to withstand normal usage. Chances are you'll have enough material in the shop scrap pile for at least one of the projects. But, if you have none of the softer metals and are unable to purchase them for the time being, substitute light-gauge sheet steel and paint the completed project in lively colors.

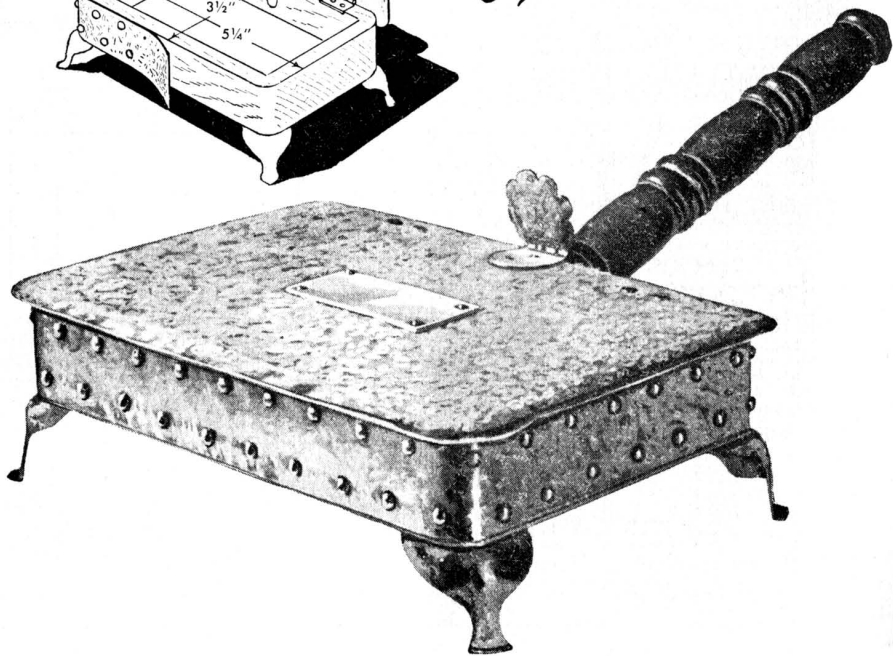
Plant holder: All parts of the plant holder are riveted together and should be hammered before they are cut out to prevent

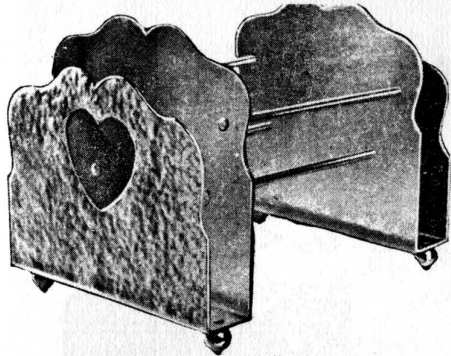


Wooden frame can be jigsawed from block or made by gluing four pieces together. End of handle is tenoned and slotted, and then glued in hole drilled at angle through frame. Wooden wedge is driven in slot to spread tenon and after glue dries, projecting end of tenon is cut and sanded flush with frame

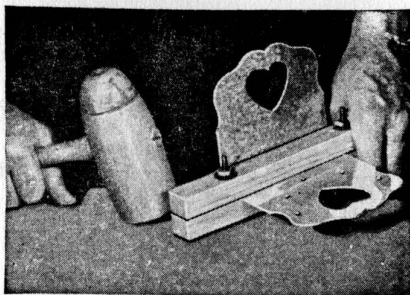


Cigarette Box

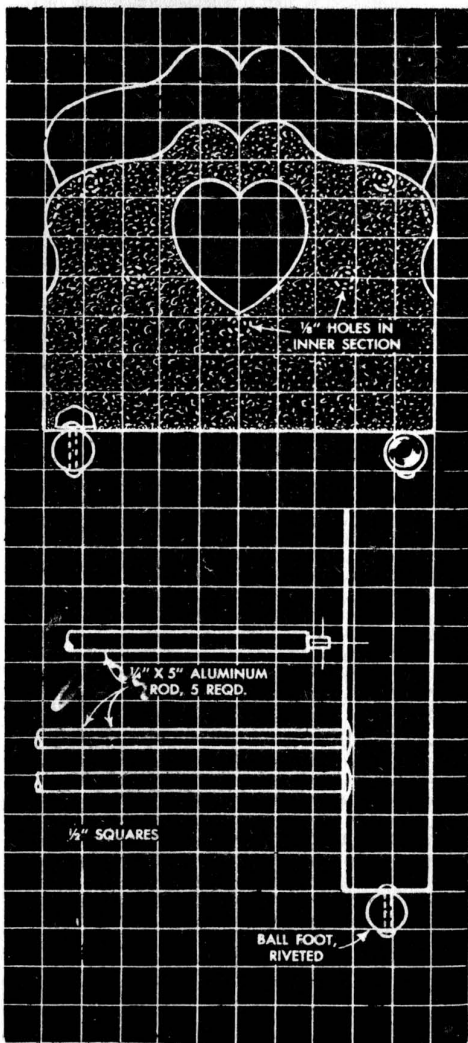




Coaster Rack



End members of coaster rack are clamped between two pieces of hardwood for bending with wooden mallet. Second right-angle bend is not made until ends of $\frac{1}{4}$ -in. rods have been fastened to sheet metal



distortion. The hole in the bottom piece, B, is cut just large enough so the rim of a flowerpot will rest on the edge. At the top of the holder, the ornamental parts, H, are inserted through the brass ring, E, during assembly. The crossed pieces of brass wire, F, which form the sides of the holder, are half-lapped and joined at the center with a furniture-upholstery nail. The latter is driven through both wires and peened over. The notched ends of the wires are inserted through holes drilled in the corner pieces, A, so the notches engage the edges of the metal. Sheet-metal clamps, G, hold the graceful wire bracket to the wall, the vertical length of wire being bent slightly to keep it from slipping. A U-shaped hook, D, is hung from the upper end of the bracket and engages the brass ring.

Cigarette box: In this project, hammered sheet metal covers a wooden frame which is fitted with a turned hardwood handle. The squared pattern details the necessary parts. The sheet-metal sidepiece, D, is fastened to the sides of the frame, E, with escutcheon pins, and a sheet-metal bottom piece is nailed to the underside of the frame. Four sheet-metal legs, F, are formed over a wooden bending jig made as in detail G. A piece of $\frac{1}{8}$ -in. plywood is riveted to the underside of the top, A, to serve as a stiffener, and the top is hinged to the frame. The monogram plate, C, the finger tab, B, and the hinges are riveted to the top.

Coaster rack: The ends of the rack, which serve as napkin holders, are jigsawed from sheet metal and joined with five lengths of $\frac{1}{4}$ -in. rod to form a trough for storing coasters or ash trays. The end members are drilled to take $\frac{1}{8}$ -in. tenons filed on the ends of the rods. The rods can be tenoned quickly by chucking them, one at a time, in a drill press and supporting the lower end in a vertical half-round groove cut in a hardwood block, the groove having a $\frac{1}{8}$ -in. radius. The block is nailed to a board which is clamped to the drill-press table. After insertion through the holes in the end members, the tenons are peened over.