



# The CRAFTSMAN

## Four-note DINNER CHIME *has soft tone*

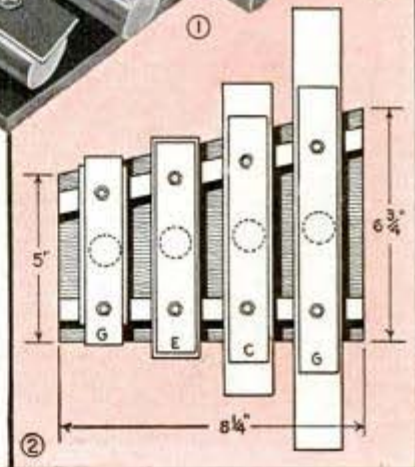
By Len Marcellus

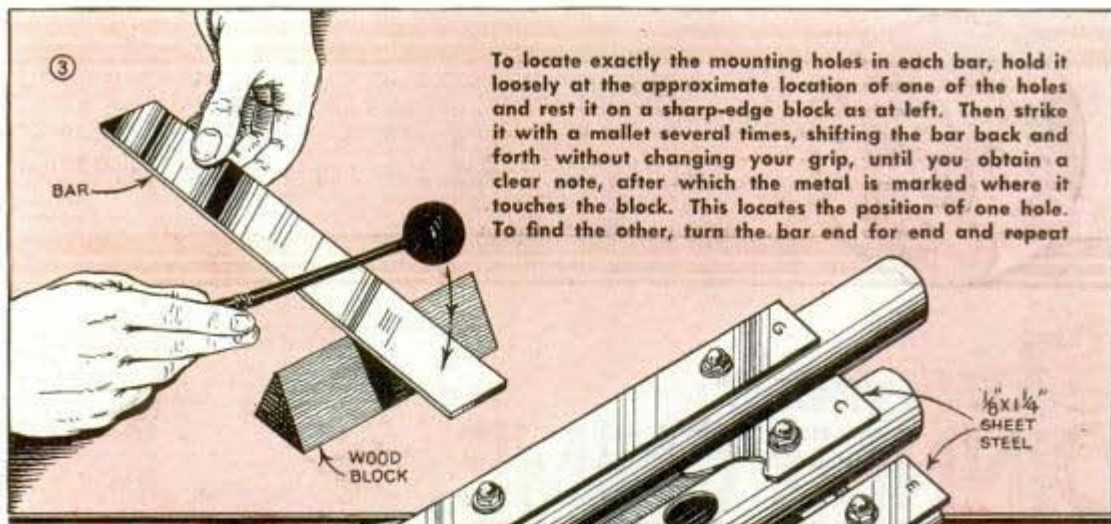
**C**OSTING little more than a dollar to make, the dinner chime shown in Fig. 1 can be finished in chrome and mounted on a maple, walnut or simply a plywood base. As an alternative, the tubes and bars may be enameled or they may be polished and protected with clear lacquer. The tubes are cut to length from standard thin-wall, brass flush pipe,  $1\frac{3}{8}$  in. in diameter, which can be purchased from a plumber. Fig. 6 gives the inside length of each tube between the cork caps. To this dimension the thickness of the cork plugs used, Fig. 7, must be added to obtain the over-all length. If you wish to add the intervening notes forming a full octave, the scale in Fig. 10 is used to determine the length of the extra tubes and bars. From Figs. 2, 4 and 8 you can see how the base is made. The tubes are attached in concave notches with flat-head stove bolts as in Fig. 5.

The bars are cut to size from  $\frac{1}{8}$ -in. sheet steel. Fig. 6 gives the length of these and also the space between the mounting holes which was found best in the case of the original model. The exact point at which these holes should be drilled from the end of the bar is found by the method shown and described

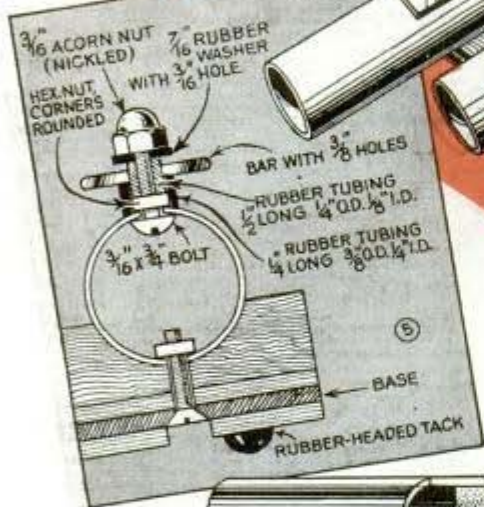
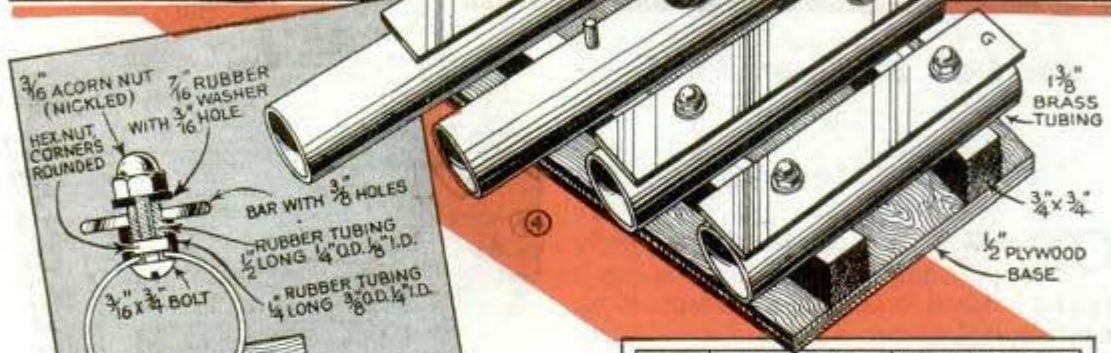


The soft, mellow notes in perfect harmony are distinctly audible throughout the house. The chime can be finished suitably in various ways to blend into its place in the home

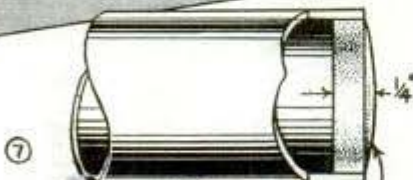




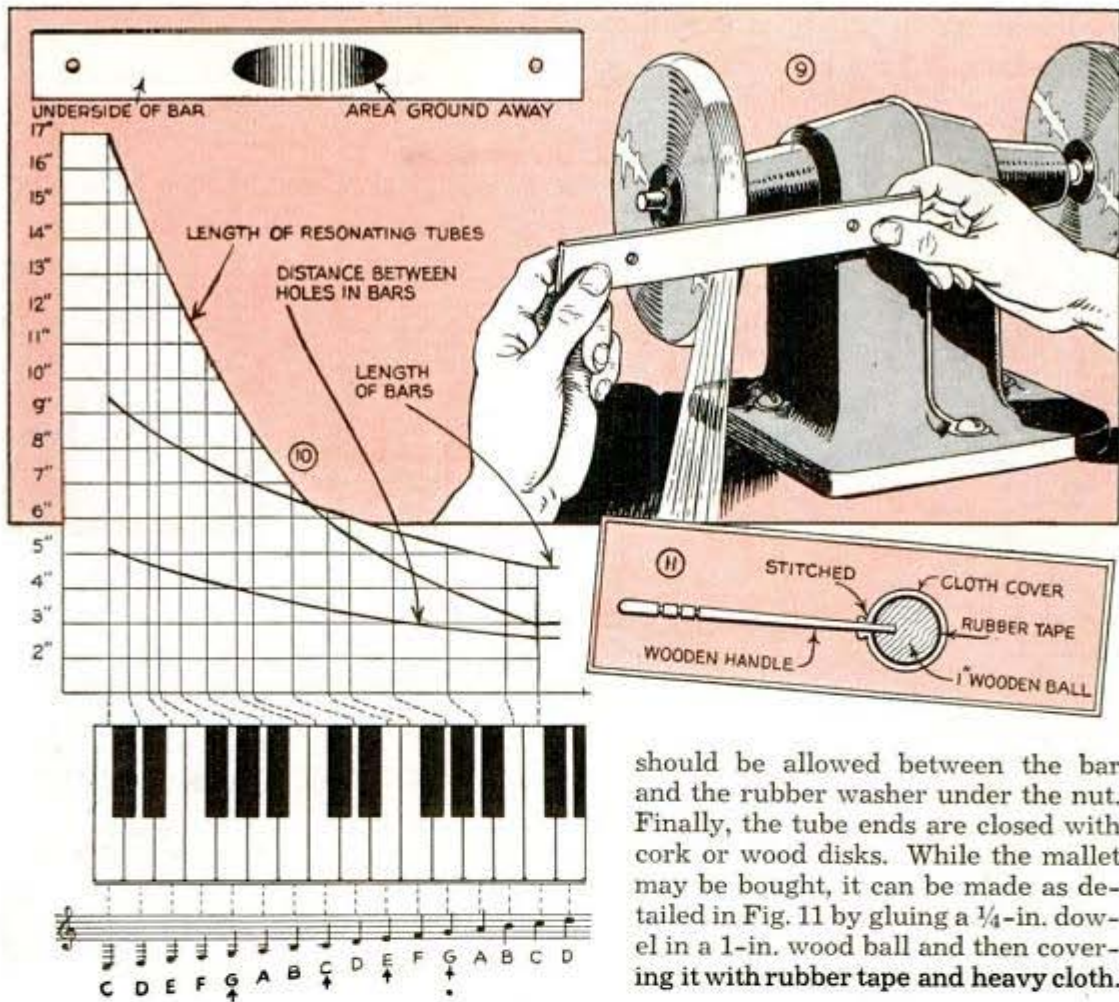
To locate exactly the mounting holes in each bar, hold it loosely at the approximate location of one of the holes and rest it on a sharp-edge block as at left. Then strike it with a mallet several times, shifting the bar back and forth without changing your grip, until you obtain a clear note, after which the metal is marked where it touches the block. This locates the position of one hole. To find the other, turn the bar end for end and repeat



NOTE	LENGTH OF BAR	TUBE	DISTANCE BETWEEN HOLES IN BAR
G	5 <sup>5</sup> / <sub>8</sub> "	4 <sup>3</sup> / <sub>4</sub> "	3 <sup>1</sup> / <sub>32</sub> "
E	6 <sup>1</sup> / <sub>4</sub> "	5 <sup>7</sup> / <sub>8</sub> "	3 <sup>3</sup> / <sub>8</sub> "
C	7"	8 <sup>1</sup> / <sub>2</sub> "	3 <sup>29</sup> / <sub>32</sub> "
G	8"	12 <sup>1</sup> / <sub>4</sub> "	4 <sup>7</sup> / <sub>16</sub> " ⑥



in Fig. 3. After drilling, the holes are used as a guide in locating the  $\frac{3}{16}$ -in. holes to be drilled in line in the top of the tubes. The bars are tuned by carefully grinding away metal from the underside, a little bit at a time, as in Fig. 9. As this is quite a delicate task, each bar should be checked frequently with a piano or other musical instrument known to be in tune. When you start, the pitch of the bars may be from one-half to three notes higher than they will be after tuning them. In the final stages of the grinding, cool the metal to room temperature before testing, as you will find that the pitch of the bars is slightly lowered when the metal is warm. The bars rest above the tube openings on stove bolts fitted with short lengths of rubber tubing placed in the arrangement shown in Fig. 5, and are capped with standard acorn-type nuts. Notice that a little space

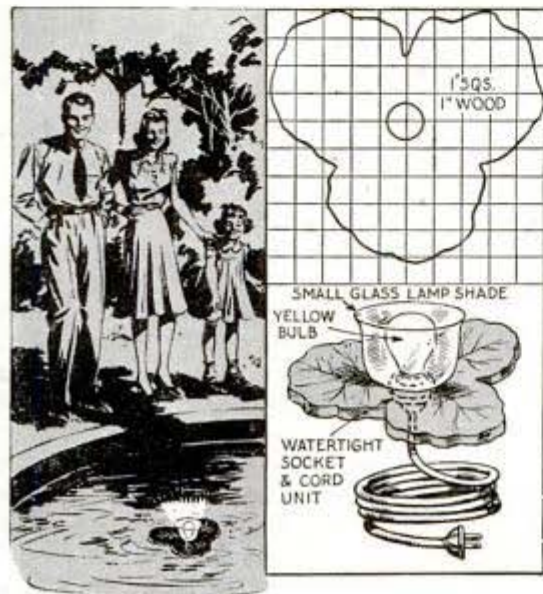


should be allowed between the bar and the rubber washer under the nut. Finally, the tube ends are closed with cork or wood disks. While the mallet may be bought, it can be made as detailed in Fig. 11 by gluing a 1/4-in. dowel in a 1-in. wood ball and then covering it with rubber tape and heavy cloth.

## Illuminated 'Water Lily' Floats on Surface of Garden Pool

A garden pool can be dressed up to give an unusual appearance at night by using a

few of these illuminated lilies. Each one consists of a length of electric cord and waterproof socket, and a yellow glass shade shaped to represent the center of a lily. The assembly is mounted on a wood cut-out shaped to give the appearance of a lily pad and painted green.



## Snap Fastener Mends Hole in Pot

You can mend a small hole in a thin aluminum pot or pan with an ordinary dress snap fastener. If the hole is very small, it should be reamed out to take the stud of the fastener. After inserting the latter, peen the end of the stud to make it watertight.

