



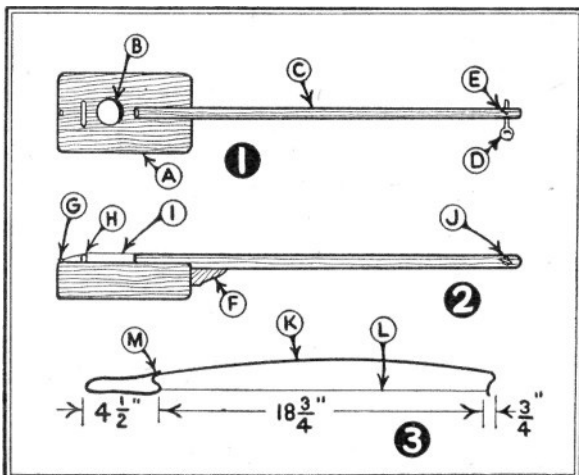
By W. J. SUTHERLAND

AFTER you've smoked the cigars, you can make music with the box they came in. It's an easy job to make a cigar box violin, so let's begin. First remove lid from cigar box (B in Fig. 4). Cut out hole 2-1/4 inches in diameter with fret saw or pen knife. Then cut a piece of broom handle, quarter it and cut in lengths the same as depth of cigar box (A in Fig. 4). Next glue quartered pieces in four corners of cigar box. This will reinforce the box and also improve the tone. Sandpaper inside of cigar box and apply two coats of shellac, allowing first coat to dry before putting on the second.

Finger board is made from a broom handle 27-1/2 inches long and 1 inch in diameter (C in Fig. 4). On one end cut out a piece 2-1/2 inches long halfway through handle. Then glue finger board (broom handle) to lid (B in Fig. 4) and

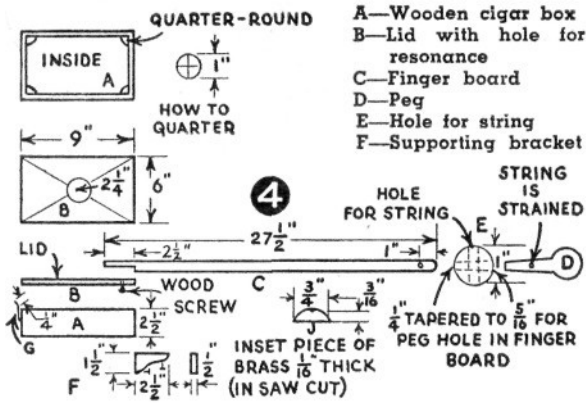


secure with small woodscrew. Drill screw hole to prevent splitting. Put screw in from up through lid into handle. At other end of finger board (E in Fig. 4) drill 3/8 inch hole 1 inch from end through from top to bottom. This is so string can wind on D (Fig. 4). Then make saw cut at edge of hole to set in piece of brass 1/16 inch thick, 3/4 inch wide and 3/16 inch high. A small notch is cut in brass with edge of file to keep string centered (J in Fig. 4). The piece of brass prevents string from cutting into handle or finger board. Another hole, 1/4 inch, is drilled at right angles through 3/8 inch hole



KEY

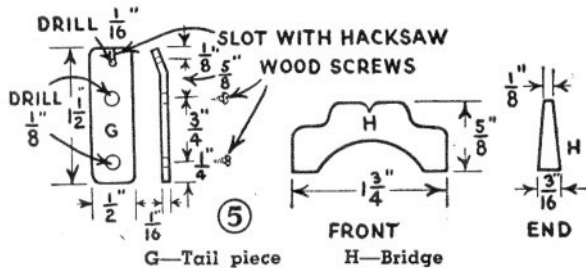
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|-------------------------------|------------------------|
| A—Wooden cigar box | G—Tail piece |
| B—Lid with hole for resonance | H—Bridge |
| C—Finger board | I—Guitar 3rd string |
| D—Peg | J—Inset piece of brass |
| E—Hole for string | K—Bow |
| F—Supporting bracket | L—Silk thread |
| | M—Wire soldered here |



already drilled. This hole is for peg (D in Fig. 4). Peg is tapered, therefore $\frac{1}{4}$ inch hole must also be tapered. This is easily done by wrapping a piece of fine sandpaper once around peg. With a rotating motion sand $\frac{1}{4}$ inch hole to taper of peg. Take sandpaper off peg and fit frequently. This is important. When string is strained peg is pushed into tapered hole and must hold at desired position when tuned. A supporting bracket is made from a piece of wood $2\frac{1}{2}$ inches long, $1\frac{1}{2}$ inches wide, and $\frac{1}{2}$ inch thick (F in Fig. 4) and glued to box and finger board and secured with two small nails.

You are now ready to sandpaper box and finger board. Apply two coats of shellac allowing first coat to dry. Use fine sandpaper again before second coat is applied. Tail piece is made of brass $1\frac{1}{2}$ inches long, $\frac{1}{2}$ inch wide and $\frac{1}{16}$ inch thick (G in Fig. 5). Drill hole $\frac{1}{16}$ inch in diameter centered $\frac{1}{8}$ inch from end. Then slot with hacksaw. Slightly bend $\frac{1}{4}$ inch from top; this prevents string from slipping out. (String should have piece of metal secured on end as anchor.) From other end of tail piece drill $\frac{1}{8}$ inch hole $\frac{1}{4}$ inch from end, and another $\frac{1}{8}$ inch hole $\frac{3}{4}$ inch higher. These holes are centered. Tail piece is fastened to end of box, $\frac{1}{4}$ inch above surface of box (G and A in Fig. 4). Bend in tail piece should project from box.

H in Fig. 5 shows the bridge, made from a piece of hardwood $\frac{3}{16}$ inch at the bottom tapered to $\frac{1}{8}$ inch at top, $1\frac{3}{4}$ inches wide, and approximately $\frac{5}{8}$ inch high. Bridge should hold string



$\frac{1}{8}$ inch off finger board. Bridge should be half-way between resonance hole and tail piece. Bridge will remain in position when string is tightened or strained.

Bow can be made from wire coat hanger (K in Fig. 3). First straighten and form as shown

in diagram. End of wire is soldered to form handle on bow as shown in M in Fig. 3. Then a spool of fine white silk thread is tied at one end of bow and stranded to other end of bow (L in Fig. 3). Thread tight enough to keep thread taut. When ready to use rub thread over a piece of rosin. If you have a regular violin bow, you can, of course, use it instead of making one. Peg shown (D in Fig. 1) is a regular violin peg. You'll find that a guitar 3rd string, if you have one, gives best results. And peg, rosin and string can be purchased at a music store in your neighborhood.

The cigar box violin is played by holding box between the knees with finger board resting on left shoulder; this allows free use of hands. The bow is held in right hand and drawn over string; left hand index-finger is placed on string. Finger is moved up and down pressing string against finger board to get the desired notes. This violin has a range of two and a half octaves, and should be tuned to G on piano.