

# Easy Weekend Gate

Create a high-style garden entry



**W**ould you believe that this beautiful gate can be built in a couple of days with just a few simple tools? It's true. And it only costs around \$200, too. You might expect to pay something closer to \$500 for a great project like this, right?

Though it may not look like it, this gate is pretty simple to make. On the next pages, I'll show you how to build the parts — the ladders, the frame, the grills and the handles — and put them together. I'll also include a few tips to make it easier and to save you some time.

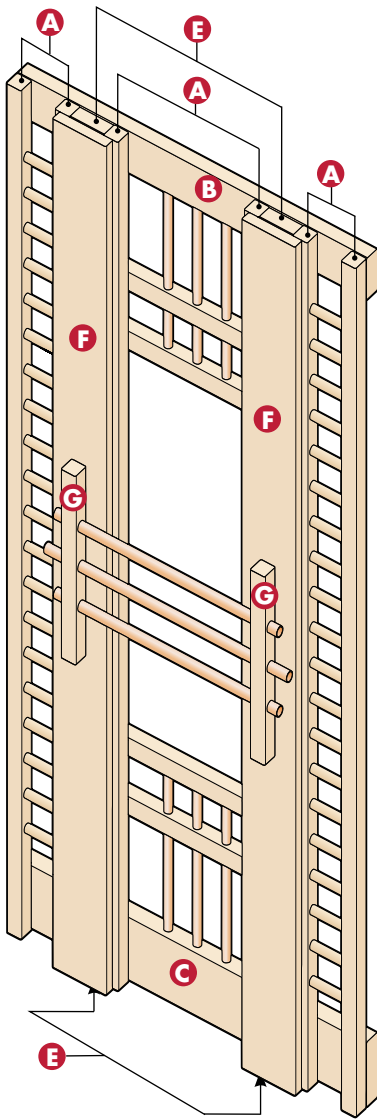
**BUY THE MATERIALS** The first place you can save yourself some time and work is at the home center when you get the materials. Take the materials list on p. 2 with you and pick up the copper pipe, oak dowels and the straightest pieces of cedar you can

find. (We're using cedar because it's rot-resistant and looks beautiful as it weathers outdoors.) Then have the staff at the home center cut the cedar and copper pipe to length for you. These stores usually allow you a set number of cuts free and then charge a minimal fee after that. Be sure to keep all the scrap pieces, too, in case you need to replace a part.

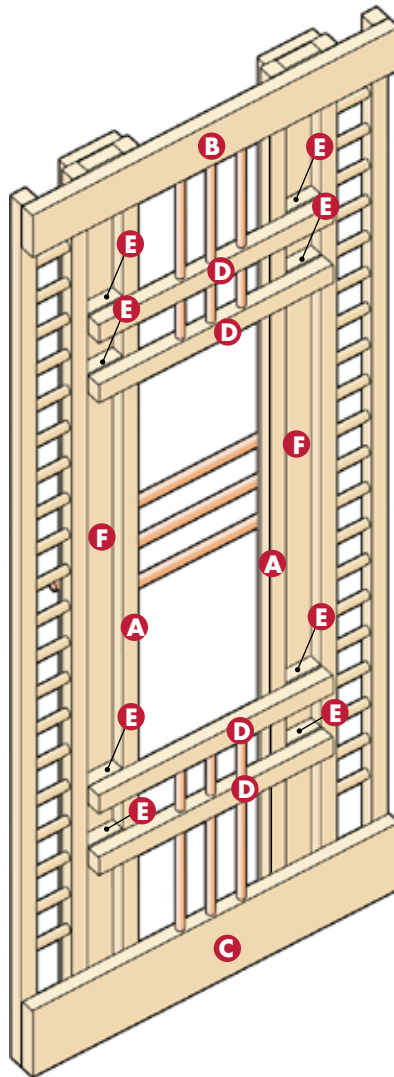
Many home centers won't cut wood into pieces shorter than 12 inches, so you may end up cutting the dowels and the smaller pieces yourself. If the store doesn't cut copper pipe, pick up a copper pipe cutter while you're there, too. It's not hard to use.

**CUT THE SMALL PIECES** When you get home, cut everything not already cut to length and label all the parts with a pencil (you can sand the marks off later) to make building easier and faster. OK, now we're ready to get started!

## FRONT



## BACK



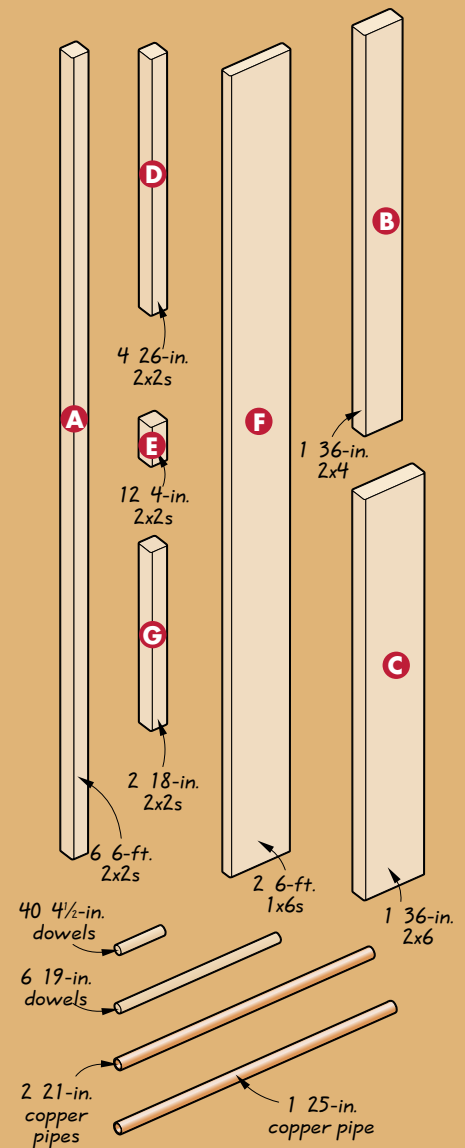
## TOOLS

Miter box and handsaw  
Tape measure  
Clamp (opens to at least 7 in.)  
Pencil  
Electric drill and  $\frac{3}{8}$ -in. and  $\frac{1}{8}$ -in. spade bits,  $\frac{1}{16}$ -in. drill bit and Phillips screwdriver bit  
Square  
Copper pipe cutter  
Hammer or mallet  
Masking tape

## MATERIALS

- 8 8-ft. cedar 2x2 (A, D, E and G)
  - 1 12-ft. cedar 1x6 (F)
  - 1 8-ft. cedar 2x4 (B)
  - 1 8-ft. cedar 2x6 (C)
  - 9  $\frac{3}{4}$ -in. oak dowels 36 in. long
  - 1  $\frac{3}{4}$ -in. copper pipe 10 ft. long
  - 1 box of 100  $2\frac{1}{2}$ -in. deck screws
  - 1 box of 100  $3\frac{1}{2}$ -in. deck screws
- Polyurethane glue

### CUT YOUR MATERIAL INTO THE FOLLOWING LENGTHS:



## ASSEMBLY MADE EASY

### 1 Build the ladders

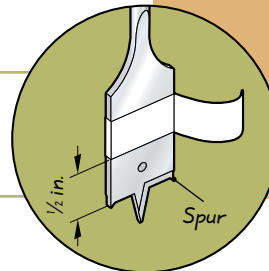
#### PARTS YOU'LL NEED:

- 4 **A** — uprights
- 40 4½-in. oak dowels
- Polyurethane glue

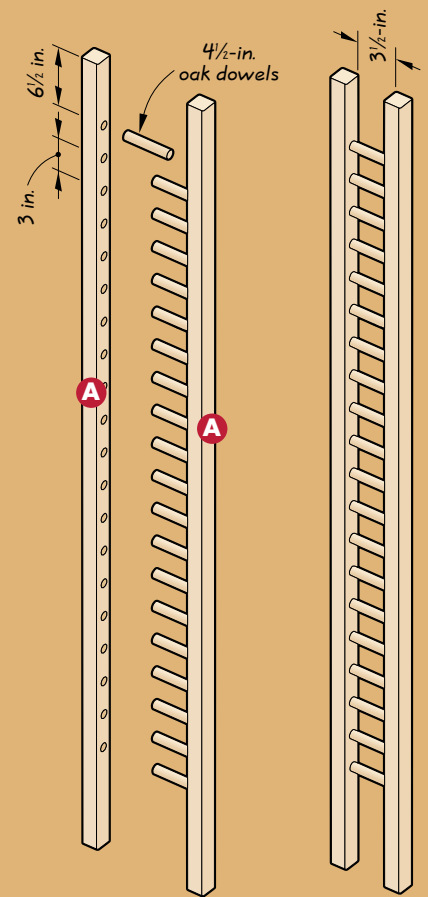
**DRILL HOLES FOR THE RUNGS** You've already cut the 40 4½-in. dowels for the rungs. Now mark and drill holes in the upright pieces (A) to hold these rungs. Starting 6½ in. from the top, mark off every 3 in. until you have 20 marks.

Next, line all four uprights up side by side and clamp them together. Make sure the ends are even and, with a square, draw a line across all four at each mark. You might also find it helpful to use a chalk line to mark the vertical center of each of the pieces. Holding the drill straight up and down, drill a ½-in.-deep hole at the center of each line. I'll show you how to make sure your holes are exactly the right depth in the tip below.

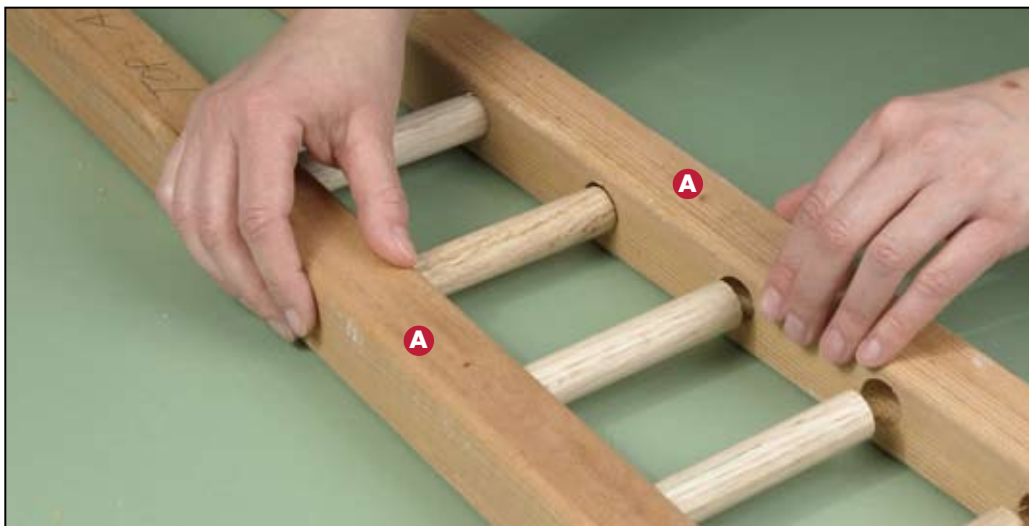
**TIP:** With a piece of masking tape, mark the spot on your ¾-in. spade bit ½ in. from the "spur" of the bit. This will show you when you've drilled the hole to the correct depth.



**ASSEMBLE THE LADDERS** Dribble polyurethane glue into the holes in the uprights and insert the dowels into the holes of one of them. Lay the two uprights on the floor as in photo 1 below, lining up the dowels to the holes in the second upright. Bracing the pieces with your foot, use a rubber mallet or hammer to pound the other upright onto the ends of the dowels so the uprights are 3½ in. apart. (If you use a hammer and are concerned about marring the surface of the wood, place a scrap piece of wood between the upright and the hammer first to protect the upright.)



When assembling uprights and rungs, start at one end of the ladder and work toward the other end.



(1) Ease the second upright (A) onto the ends of the dowels with your hands, then pound them on the rest of the way with a rubber mallet or a hammer.

## 2 Assemble the frame

### PARTS YOU'LL NEED:

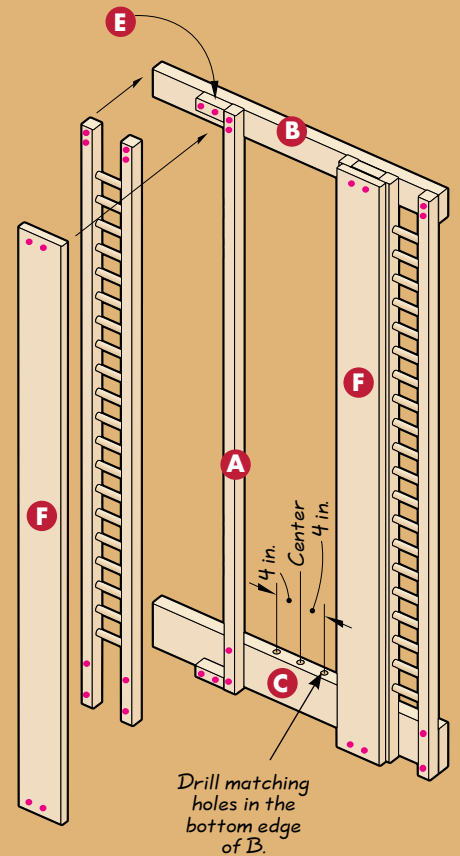
- 2 **A** — uprights
- 1 **B** — top
- 1 **C** — bottom
- 4 **E** — fillers
- 2 **F** — boards
- 40 — 2½-in. deck screws
- The two ladders

### DRILL HOLES IN THE TOP AND BOTTOM

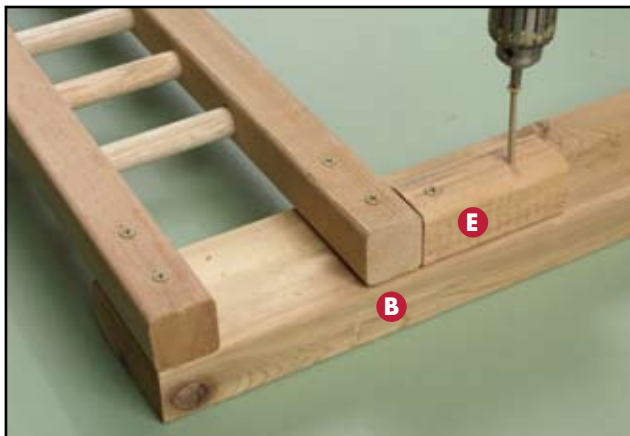
Before you assemble the frame, drill three ½-in.-deep holes with your ⅜-in. spade bit in one edge of the top (B) and the bottom (C). Use the spacing shown on the illustration at right. The longer dowels will slide into these holes later when you assemble the grills.

**ASSEMBLE THE FRAME** Now, lay the top and bottom pieces down. Make sure the edges with the holes are facing each other. Spread these two pieces far enough apart that you can lay the two ladders on top to form the frame. Attach ladders to the top and bottom with four 2½-in. screws at each end as in photo 2. Predrill all holes for screws first with a ⅛-in. straight bit to prevent splitting the wood.

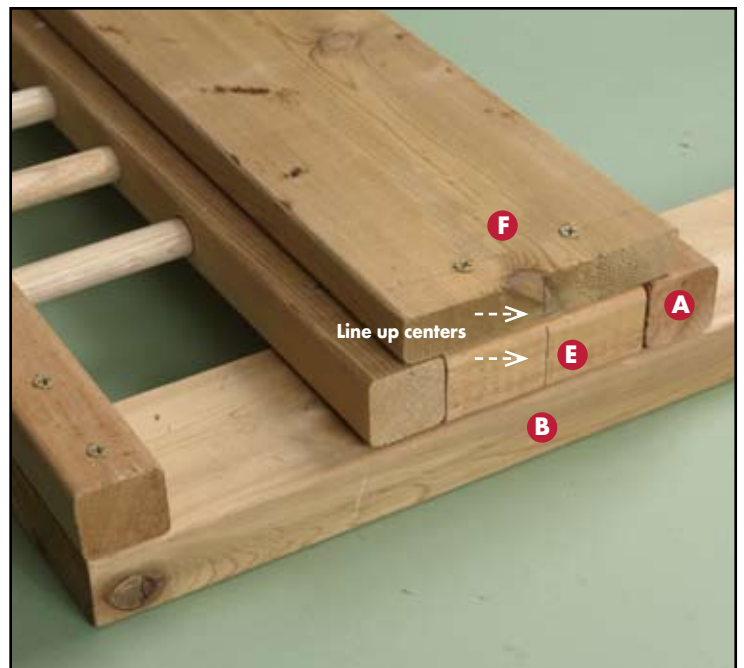
Next, butt the four fillers (E) up against the ladders (photo 3), and then the two remaining uprights (A). Attach all the pieces with two screws each. Finally, set the 1x6 boards (F) in place (as in photo 4) and attach by screwing them to the fillers. (Carefully place the screws so they don't hit those in the fillers underneath.)



**(2)** Attach the ladders to top and bottom (B) and (C) with four 2½-in. deck screws at each end of each ladder.



**(3)** Align an (E) to the top edge of (B) and butt it up to the ladder. Attach with 2 screws.



**(4)** Align center lines of (F) and (E) and drive two screws through (F) into (E) at each end of the two (F)s.



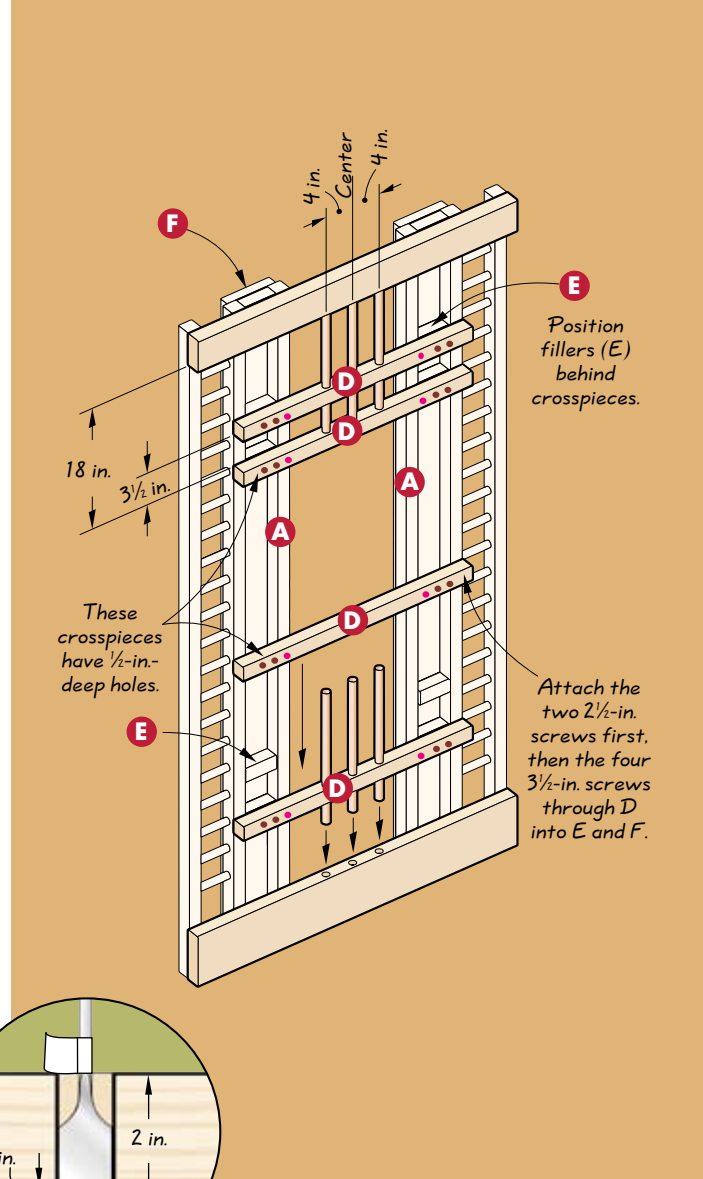
## 3 Add the grills

### PARTS YOU'LL NEED:

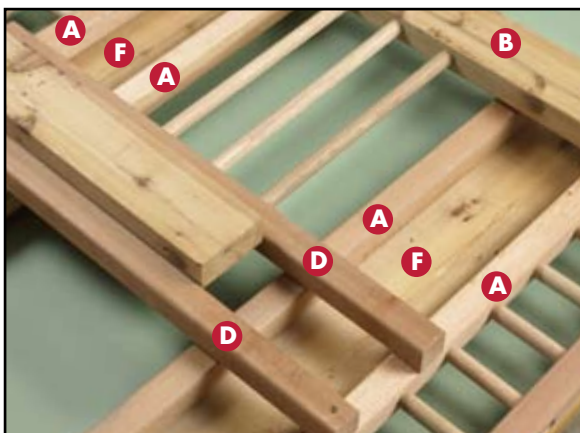
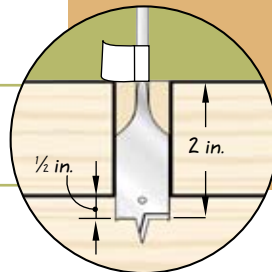
- 4 **D** — crosspieces
- 8 **E** — fillers
- 8 ● — 2½-in. deck screws
- 16 ● — 3½-in. deck screws
- 6 19-in. dowels

**DRILL THE FOUR CROSSPIECES** Place a crosspiece (D) on a scrap piece of wood and, using the spacing shown at right, drill three ¾-in. holes all the way through the piece. Next, use this piece as a guide to drill another crosspiece just like it. Then replace the tape as shown in the tip below and repeat with the last two crosspieces, but drill the holes only ½ in. deep. The top and bottom grills each need one piece with through-holes and one with ½-in.-deep holes.

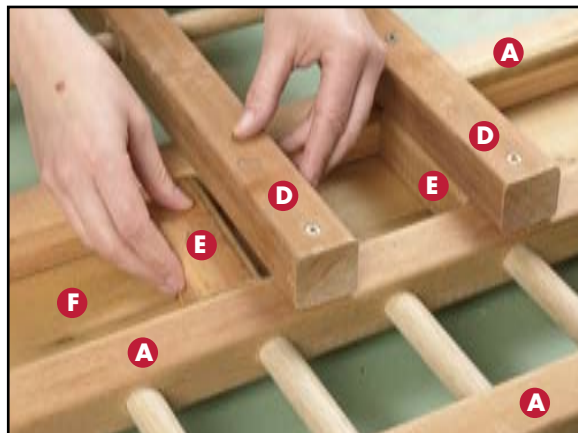
**ASSEMBLE THE GRILLS** Flip the gate over so you're looking at the back side. Insert three of the 19-in.-long dowels into the holes in the top of the frame. You won't need to glue the dowels into these holes. Slide a crosspiece (D) (with the through-holes) over the dowels and then put another one (with ½-in. deep holes) onto the ends of the dowels (photo 5). Tuck one filler (E) under each end of each crosspiece as in photo 6. Put two 3½-in. screws at each end of the crosspieces, driving them through the crosspieces and the fillers into the vertical boards. These longer screws will prevent the vertical boards from bowing or cupping. Now repeat these steps for the grill at the bottom of the gate.



**TIP:** Use your first drilled crosspiece (D) as a guide. Clamp it to each of the other three crosspieces and drill remaining holes.



**(5)** Using a scrap 2x4 as a spacer between the crosspieces (D), attach each crosspiece to the four uprights (A) with four 2½-in. screws.



**(6)** Tuck one filler (E) under each end of the four (D)s. Drive two 3½-in. screws through the (D) and (E) into (F).

## 4 Attach the handles

### PARTS YOU'LL NEED:

- 2 **G** — handles
- 4 **F** — 2½-in deck screws
- 2 21-in. copper pipe
- 1 25-in. copper pipe

**DRILL THE TWO HANDLES** Change to a ⅞-in. spade bit in your drill and drill three holes all the way through the two handles (G) using the measurements at right. The three copper pipe pieces will run horizontally through these holes.

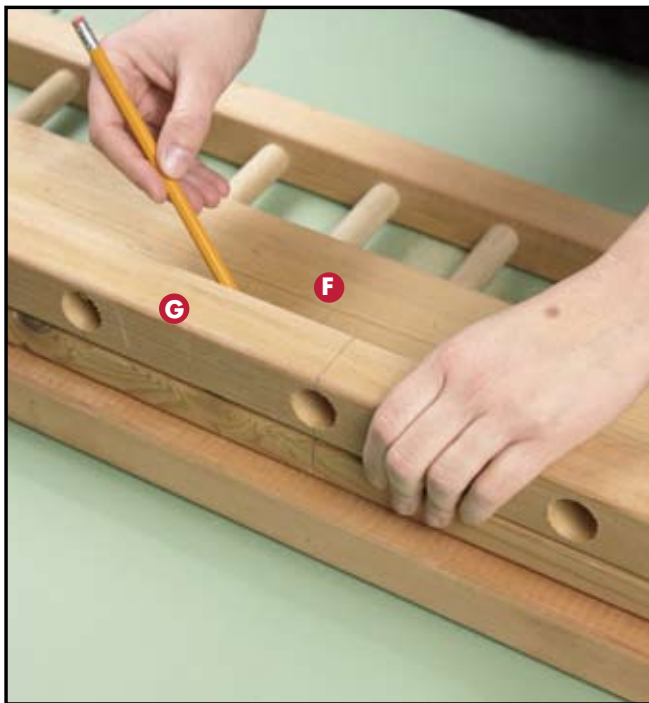
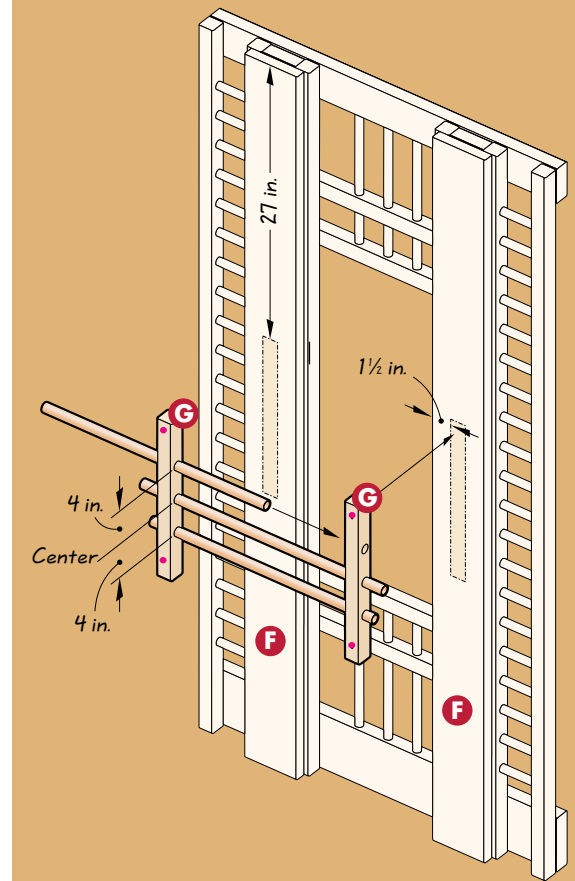
### ATTACH THE TWO HANDLES

Flip the gate over again, so you're looking at the front. Center the handles on the boards (F), 1½ in. from the inside edges. Photos 7

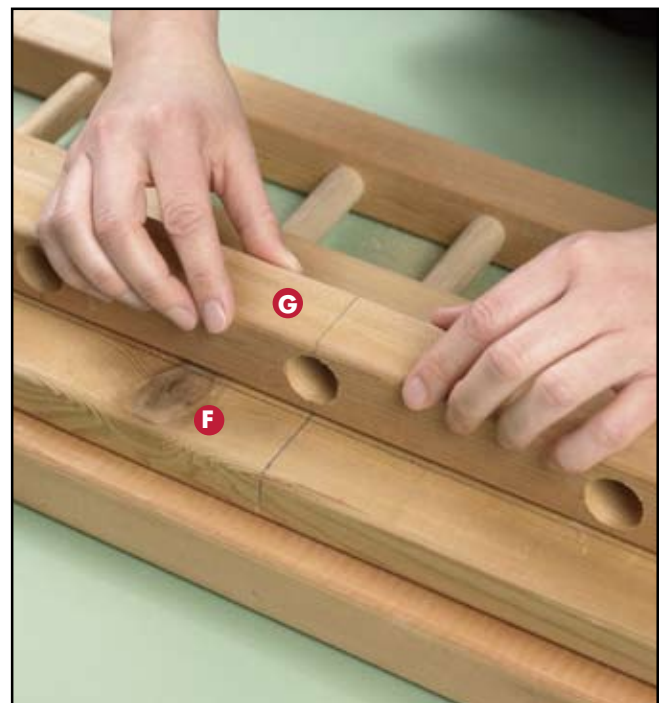
and 8 below show an easy way to position the handles. Attach each handle in place with one 2½-in. deck screw at each end. Slide the three lengths of copper pipe through the holes in the handles, the long one in the center holes and the two shorter ones through the top and bottom holes. If it's a tight fit, tap the ends with the rubber mallet.

**FINISH UP** Coat your gate with an exterior finish, such as Penofin® Penetrating Oil Finish, or leave it to weather naturally to a nice silver gray.

This 6-ft.-by-3-ft. gate is hefty, so I mounted it with three heavy-duty hinges and a matching latch. You can find them at hardware stores or the home center where you got all the other materials.



**(7)** Align the edge of the handle (G) with the edge of (F). Draw a line along the edge of (G) and then move the piece to just the other side of that line.



**(8)** Locate, draw and align the center lines of the handle (G) and (F). Then attach the handle with two 2½-in. deck screws.

## How to Modify the Easy Weekend Gate

In the Easy Weekend Gate from Issue 75, we showed you the materials, tools and steps for building a cedar gate, 3 ft. wide by 6 ft. tall. But what if you need a different size? The design of this gate makes it simple to modify to fit your situation.

**HOW TO SHORTEN THE GATE** To shorten the gate, follow all steps and keep all the parts the same with a few exceptions:

First, cut the six uprights (A) and the two 1x6 boards (F) to the height you'd like. The gate in the Modified plan below is 48 in. high.

Second, you will need to cut fewer of the short dowels used as rungs for the ladders. For our 4-ft. gate we'll need only 26 rungs instead of 40.

And finally, cut the two handles (G) to 5 in. long instead of 18 in. You'll need just one length of  $\frac{3}{4}$ -in. copper pipe instead of three. Cut it to 25 in. long.

**HOW TO NARROW THE GATE** To make the gate narrower, keep all the parts the same as for the original gate with these exceptions: Cut the top (B) and bottom (C) to whatever width you need. The gate in the modified plan is 32 in. wide.

Cut the shorter oak dowels to 3 inches long instead of  $4\frac{1}{2}$  in. and assemble the ladders (Step 1) and then the frame (Step 2) the same way as you would for the original gate.

You'll need to cut the four crosspieces (D) to fit the width of your gate. To find this measurement, with the frame assembled, measure the distance between the inside uprights of the two ladders. (See the back view of gate in Step 3.) Use this measurement for the length of the four crosspieces. In our example, a 32-in.-wide gate would have 22-in.-long crosspieces.

Finally, figure out the length of the copper pipe used for the handle. In our example, the gate is 4 in. narrower than the original gate, so we'll make the copper pipe 4 in. shorter, or 21 in.

Then follow the rest of the steps in the story to finish building your gate.

