

# Sliding Bookrack

by Seth Keller



Arts & Crafts details  
add sophistication  
to a simple project

**I've** always admired the work of Greene & Greene, two architects who designed Arts & Crafts homes and furnishings in the early 20th century. Their detailing is exquisite. I love the softened edges, pegged joinery, square motifs and overall lightness of their work. When I needed bookends to hold some special volumes, I

turned to these gifted artists for inspiration.

This bookrack works on a very simple principle: friction. The bookends are adjustable, sliding on two rails to hold any set of books. But when you push the ends up to the books, they tilt slightly and bind against the rails. They're locked in place. When you pull a book out, the ends are released and free to slide again.

# PROJECT REQUIREMENTS AT A GLANCE

FIGURE A EXPLODED VIEW

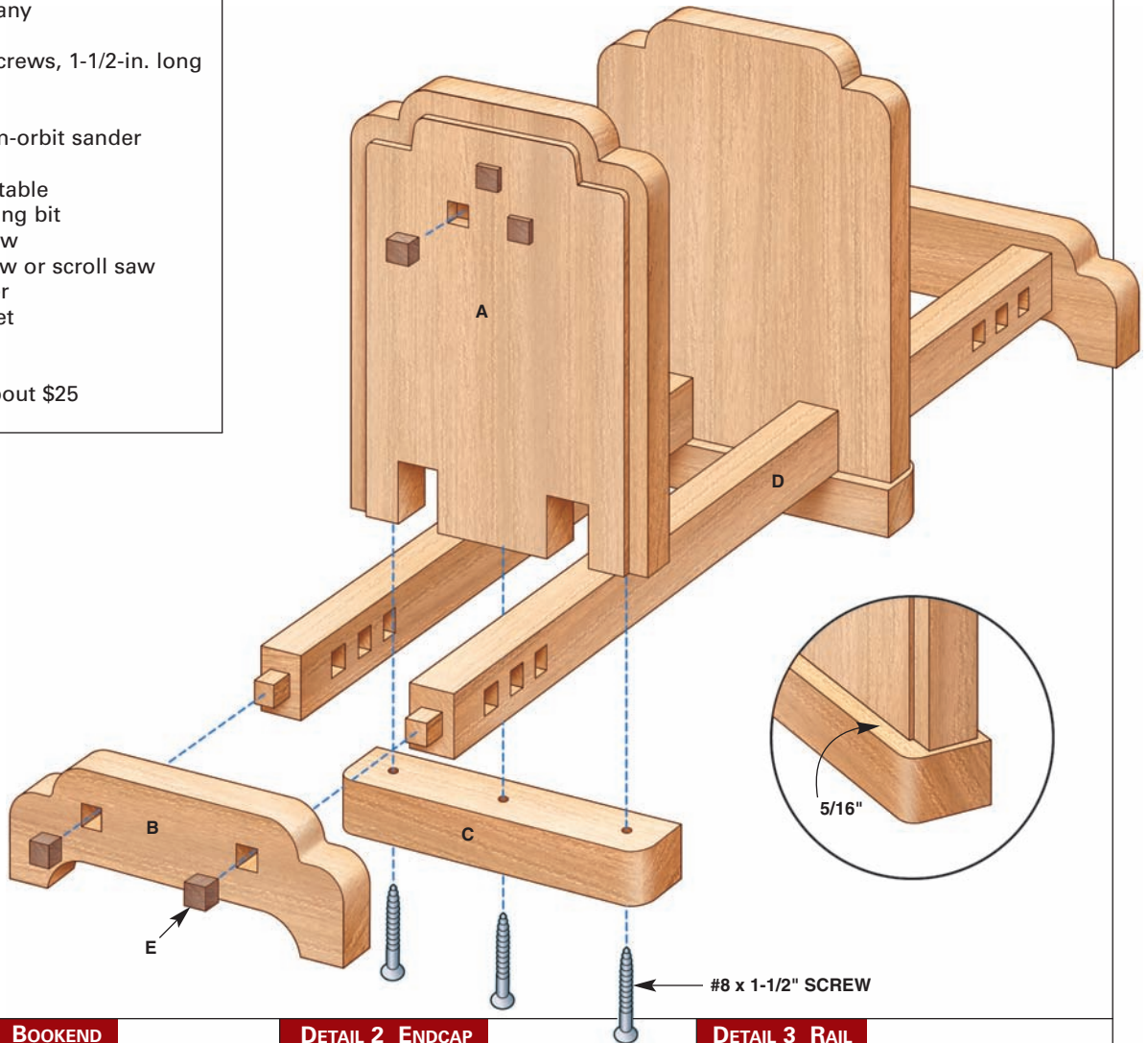
### Materials

Mahogany  
Walnut  
No. 8 screws, 1-1/2-in. long

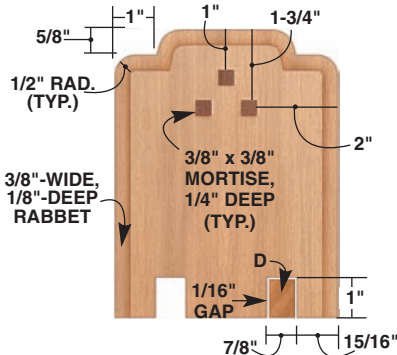
### Tools

Random-orbit sander  
Router  
Router table  
Rabbeting bit  
Tablesaw  
Bandsaw or scroll saw  
Mortiser  
Dado set  
Planer

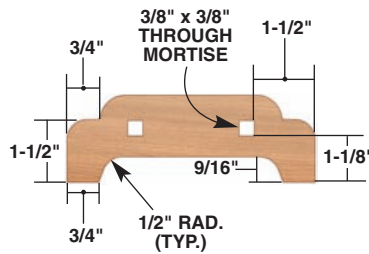
Cost about \$25



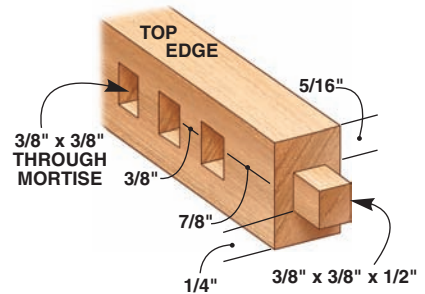
### DETAIL 1 BOOKEND



### DETAIL 2 ENDCAP



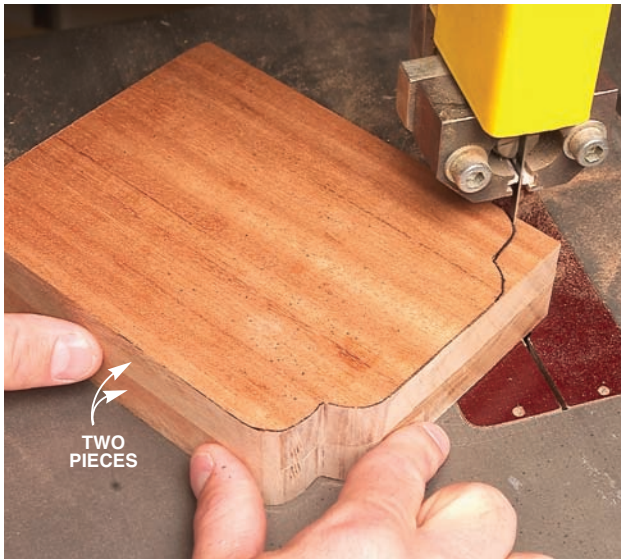
### DETAIL 3 RAIL



### CUTTING LIST

OVERALL DIMENSIONS: 7-13/16"H x 6-1/8"W x 23-1/2"L

| Part | Name    | Qty. | Material | TH x W x L             |
|------|---------|------|----------|------------------------|
| A    | Bookend | 2    | Mahogany | 3/4" x 5-1/2" x 7"     |
| B    | Endcap  | 2    | Mahogany | 3/4" x 2-1/8" x 6-1/8" |
| C    | Base    | 2    | Mahogany | 3/4" x 5-3/4" x 1-1/4" |
| D    | Rail    | 2    | Mahogany | 3/4" x 15/16" x 23"    |
| E    | Pegs    | 10   | Walnut   | 3/8" x 3/8" x 1/4"     |



**1** Begin by sawing the sliding bookends and other curved pieces. You can cut two at the same time. Hold the pieces together with double-stick tape.



**2** Rout a stepped profile on the bookends using a rabbeting bit. To safely begin the cut, pivot the workpiece against a starting pin. Once started, you can ride on the bit's bearing.

## MAKE THE PARTS

1. Mill the bookends (A), endcaps (B) and bases (C) to final size. Mill the rails (D) an extra 1/8 in. thick.

2. Cut the bookends, endcaps and bases on the bandsaw (Photo 1; Fig. A, page 46). Sand the sawn edges. Use 100-, 120- and 150-grit sandpaper.

3. Rout the bookend profile with a 3/8-in. rabbeting bit (Photo 2; Fig. A, Detail 1). Raise the bit in 1/16-in. increments to avoid tear-out. Use a chisel to square the rabbet's inside corners.

4. Cut shallow mortises into the bookends (Fig. A, Detail 1). Cut through mortises in the endcaps and rails (Photo 3; Fig. A, Details 2 and 3).

5. Plane the rails to final thickness (Photo 4).

6. Cut tenons on the rails using a dado set (Fig. A, Detail 3).

7. Make pegs (E) from 3/8-in.-thick square blank. Cut the pegs to length with a Japanese pull saw, dovetail saw or bandsaw.

## ASSEMBLE THE BOOKRACK

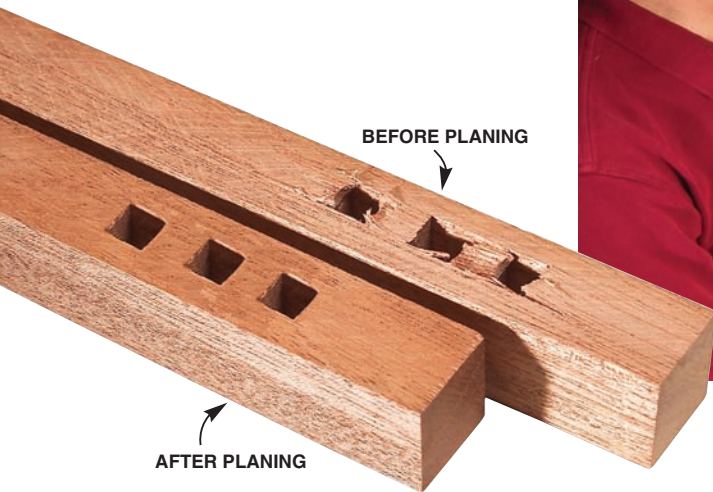
8. Glue and clamp the rails and endcaps. Work on a flat surface. Check the assembly for wobble before you set it aside to dry.



**3** Cut square holes through the rails using a mortising machine. Some tear-out on the back is inevitable, even with a sacrificial board under the rail, but you'll remove it in the next step.

9. Glue pegs (E) into the bookends and endcaps (Photo 5). Leave the pegs proud by at least 1/16 in. Scrape excess glue from around the pegs before the glue dries.

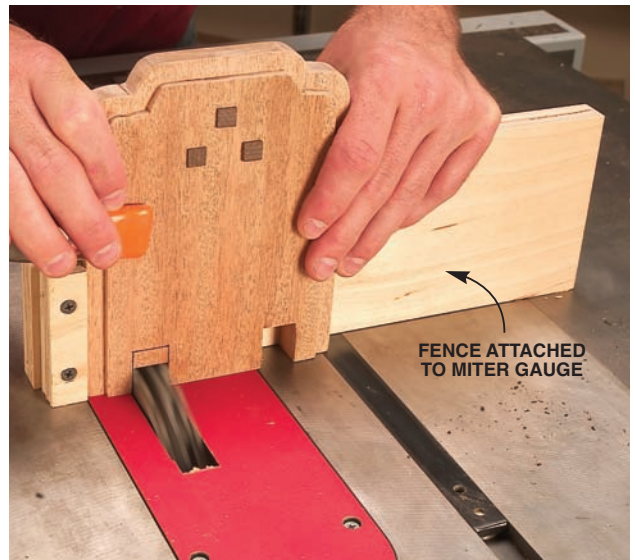
For small projects,  
the beauty is in the details.



**4** Plane the rails to final thickness. Place the torn-out sides facing up. They'll come out perfectly smooth.



**5** Glue walnut pegs into the square holes. The heads of the pegs should be slightly proud of the surface. Round over their sharp corners with sandpaper after the glue is dry.



**6** Cut slots in the bookends. Their spacing is critical for the bookends to slide smoothly on the rails. Assemble the base first; then mark each slot's position directly from the rails.

**10.** Use 180-grit sandpaper in a random-orbit sander to round the edges of the pegs.

**11.** Mark the positions of the bookend slots directly from the rail and endcap assembly. Cut the slots using your miter gauge and a tall auxiliary fence (Photo 6). Make multiple passes, raising the blade 1/4 in. with each cut.

**12.** Pre-drill the bases and bookends. Screw these parts together on the rail and endcap assembly and test their fit. There should be a little play so the bookends will slide. Disassemble the bases and bookends for finishing.

**13.** Sand with 180- and 220-grit sandpaper to gently

round the edges of the bookends, endcaps, rails and bases. Don't sand the bookends' bottom edges.

**14.** Apply the finish. I used a mixture of cherry and medium-walnut Danish oil to achieve a beautiful warm tone, and wiped on two coats.

**15.** After the finish is dry, apply a coat of paste wax over every surface and rub out with #0000 steel wool to an even sheen. This is an essential step. The wax lubricates the rails, allowing the bookends to slide smoothly.

**16.** Screw the bases to the bookends and load the rack with books.