

WOODWORKER'S JOURNAL

downloadable plans:
"America's leading woodworking authority"™

Arts & Crafts Picture Frame

In this plan you will be getting:

- Step by Step construction instruction.
- A complete bill of materials.
- Exploded view and elevation drawings.
- How-to photos with instructive captions.
- Tips to help you complete the project and become a better woodworker.



To download these plans, you will need **Adobe Reader** installed on your computer. If you want to get a free copy, you can get it at: **Adobe Reader**.

Having trouble downloading the plans?

- If you're using Microsoft Internet Explorer, right click on the download link and select "Save Target As" to download to your local drive.
- If you're using Netscape, right click on the download link and select "Save Link As" to download to your local drive.

WOODWORKER'S JOURNAL
©2007 ALL RIGHTS RESERVED

\$7.95

WJ087



Published in Woodworker's Journal "Practical Woodworking: Proven Projects, Tips and Tricks from Fellow Woodworkers"



Arts & Crafts Picture Frame

Sure, the focal point of most artwork is generally the art and not the frame that contains it. But that's no reason to ignore the need for a proper and visually pleasing frame. Our double-frame design features pinned mortise and tenon joints for durability. Its proportion, wood grain and warm finish contribute to a harmonious whole.

The craft of framemaking has a long and rich history comparable to that of furnituremaking. In recent times, however, the use of pre-cut and pre-finished moldings has reduced most picture framing to little more than gluing and underpinning ready-made molding lengths to size. We believe the joy of framemaking comes from designing and carrying through your own individual creation.

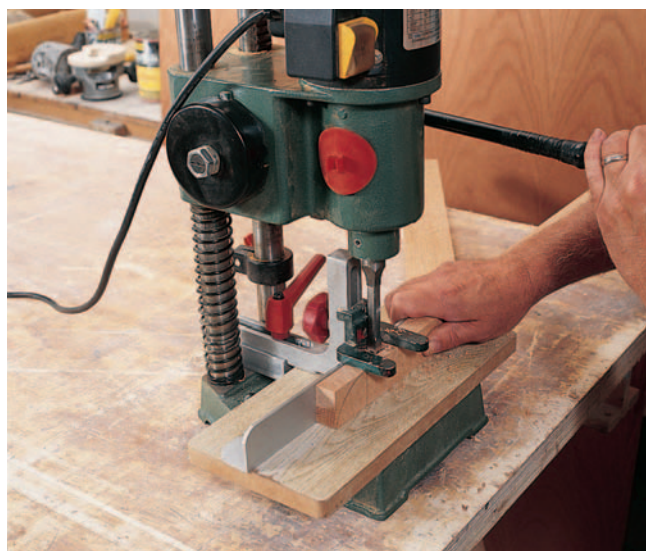
Striking a Balance in Frame Design

Ideally, a frame design should complement both the art's subject matter and style, with the relationship between the framing components—artwork, mat and frame—established through rules of proportion. It is also important to relate the width of the frame to the overall size of the print, making sure that the frame appears sturdy enough to support the perceived visual weight of the artwork. Keep in mind that a print containing large shapes often calls for a wider frame than a print of the same size containing very small details.

Regarding Grain Selection

Arts & Crafts period furniture was left unpainted both to display the methods of construction and to reveal the beauty of the wood. The wood of choice was quartersawn white oak. Although the designation of quartersawn is usually thought of as specific, the variations within that classification actually are quite wide. When considering a frame design, you'll be confronted with the enjoyable decision as to which one of the grain patterns to use. They range from rift (straight grain with a combed effect), through small flakes and tiger stripes, to patterns that look like lightning strikes.

Considering both subject and style of the artwork helps when choosing your material. In this frame, the moderately heavy

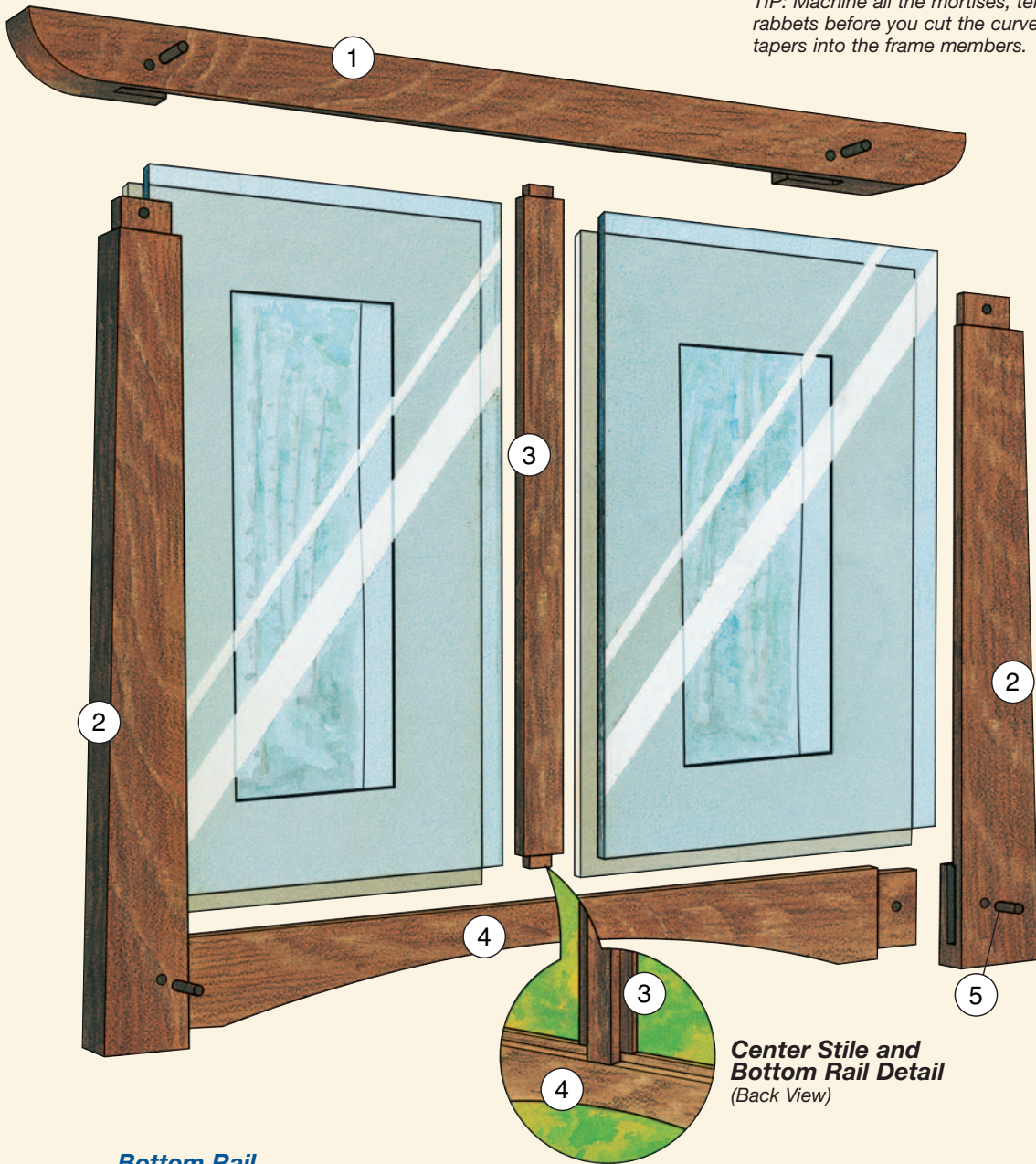


Chop mortises into the appropriate frame members first and then make tenons to match. Later they will be pinned to create simple and long-lasting joints. Mortise and tenon joints must fit perfectly to be attractive.

When building your own frames, select wood with an annual grain pattern that enhances the art being displayed.

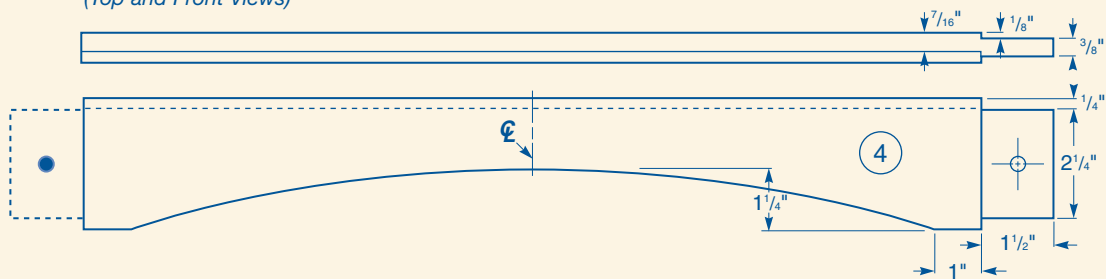


Picture Frame Exploded View



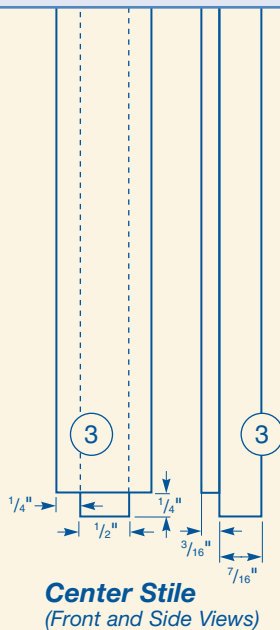
TIP: Machine all the mortises, tenons and rabbets before you cut the curves and tapers into the frame members.

Bottom Rail
(Top and Front Views)

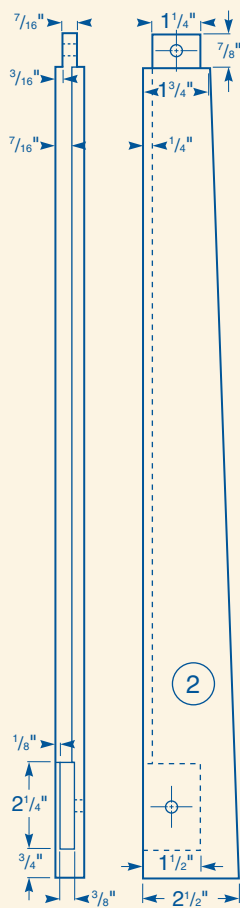


MATERIAL LIST – Picture Frame

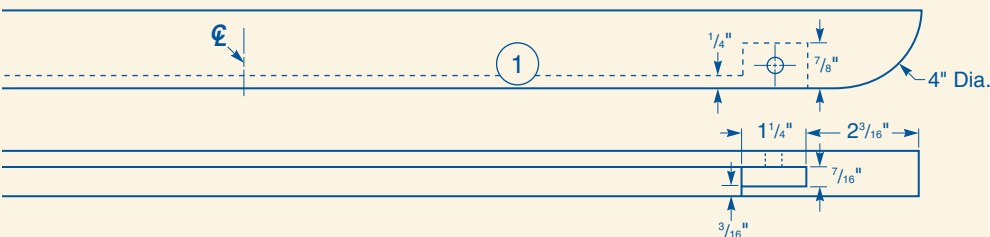
	T x W x L
1 Top Rail (1)	7/8" x 1 1/2" x 26 1/8"
2 Side Stiles (2)	3/4" x 2 1/2" x 21 7/8"
3 Center Stile (1)	5/8" x 1" x 18 1/4"
4 Bottom Rail (1)	5/8" x 2 3/4" x 21 3/4"
5 Pins (4)	3/8" Dia. x 3/4"



Side Stile (Side and Front Views)



Top Rail (Front and Bottom Views)



Hanging Hardware:

1- or 2-hole “D” hangers are preferable to screw eyes, because they allow the frame to hang straight on the wall. Install the hangers a third of the way down from the top edge of frame. Use braided picture wire of sufficient strength to support the frame, glass and art.

grain selected enhances the “woody” feel of the images without competing with them. Always strive for harmony.

Once you’ve selected an appropriate grain, you must balance the wood grain placement in the frame. This means the sides should somewhat mirror each other, and the top and bottom pieces should be of similar grain pattern.

While the finished frame is quite elegant, the joinery is very basic. The primary joint here is the pinned blind mortise and tenon, which adds to the project’s simplicity. But in this simplicity still lies complexity—there’s “no room to hide.” Simple joints must still fit together well.

Making Tenons and Mortises

Machine all the tenons and mortises while the stock is stacked up, and take special note of the thickness dimensions. Cut the frame pieces to length and width as shown in the *Material List*. Next form the mortises in the top rail and sides (pieces 1 and 2). A mortising machine makes short work of this task, but any method, from traditional to modern, will work. Refer to the *Elevation Drawings* at left for all of the construction details. Now that you have the mortises prepared, move on to making the tenons. As shown on page 91, we used a radial arm saw outfitted with a dado head to reveal the tenons, including those on the center stile and bottom rail (pieces 3 and 4).

In our shop, we’ve found that it is more effective to match the tenons to the mortises rather than make the mortises match the tenons. Test-fit your joints as you go: they should be snug, but not too tight. Now step over to your router table and, with a straight bit chucked in your router, set up to shape the rabbets along the inside edges of the frame pieces. As you can see by the *Elevation Drawings*, these rabbets are stopped within the length of all the frame members except



A well-applied coat of Minwax® dark walnut stain produces a reasonably close approximation to ammonia fuming. It's an appropriate tone for Arts & Crafts-styled pieces like this.

the center stile. With this step you create left and right versions of the side stiles, so take a moment to plan for that.

Adding Tapers, Curves and Rounded Corners

With those tasks completed, you are ready to cut the tapers, gentle curves and rounded corners that announce the Arts & Crafts influence of this picture frame. Grab your side stiles and mark out the taper cut on each piece. To achieve this cut, use a simple taper jig on the table saw. But again, method takes a second place to accuracy, and you could easily cut the tapers on the band saw or by hand if you choose to do so.

And speaking of the band saw, use it to shape the curve and corners on the bottom and top rails. Mark a 4" radius on each of the top rail's corners. Cut them on the band saw and sand the saw marks smooth later. The curve or arc that details the bottom edge of the bottom rail is also simple to mark. Measure up 1¼" from its bottom edge at the center point and then flex a thin strip of hardboard or a metal ruler from two corner marks (shown on the *Elevation Drawings*) to the indicated center point. Trace the curve onto the rail (ask a friend to help you), and you are ready to band saw. Sand the sawn edge smooth as well as the various pieces up to 180 grit. Now is also the proper time to test-fit all the pieces and be sure the whole assembly goes together without problems.

With the frame dry-assembled and clamped together, mark the locations of the joint pins (pieces 5). Step over to your drill press and bore holes deep enough to go all the way through the tenons you will be pinning. Cut your pins so they will be just a bit proud of the frame members and prepare for final assembly.

Putting It All Together

Glue, clamp and pin the frame together, making sure that the assembly is square and flat in your clamps. Secure the center stile with a bit of glue and one tiny brad at each end. Pre-drill for the brads...it would be a catastrophe to split your wood at this point. Once the glue cures, sand the pins flush and give the entire frame a final finish-sanding. Stain the frame to complement the art you are framing and complete the job with low-luster polyurethane.

Next, you need to mat and mount your art (see the *side-bar*, next page) and hang the frame on the wall. (There are several options for frame hangers available.) Once it's up, you will get to experience the bittersweet reality of a quality picture frame maker. Without a doubt, your guests will comment and compliment the art that you are displaying...but you'll know that they are also experiencing the pleasure of a well-made picture frame. Your work may not be the star of the show, but talk about an award-winning supporting cast!

For the authors, one of the most important aspects to proper framing is to protect the art in an "archival frame package," as described at right. You can find archival material at a quality art supply store.



PROTECT YOUR ART...FROM THE FRAME

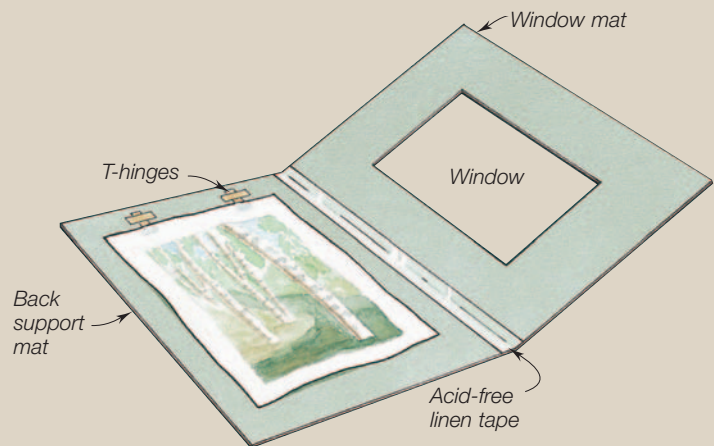
Proper framing preserves your artwork and prevents future problems. An archival frame package consists of a backboard or support for the art (which must be properly hinged or mounted), a window mat, glazing and a dust cover. As a wood frame ages it becomes acidic, which is damaging to artwork. Use aluminum-faced frame sealing tape to isolate the art from the frame's rabbet.

Glazing: Select glass or Plexiglas™ that has been coated to filter out the UV rays.

Clean glazing with an anti-static brush prior to assembling the frame package. **Hinging:**

Japanese rice paper attached with wheat or rice starch is our choice. **Matting:** Use only pH neutral mat board. Attach the window mat to the back support with archival linen tape along their longest side.

Dust cover: Acid-free paper must cover the entire back of the frame, affixed to the outer edges with double-sided tape (ATG 924). Finally, keep the frame away from the wall with small "bumpers" (cork, plastic or felt buttons) placed in the bottom corners.



QuickTip

Tape Clamps

There's nothing quite as elegant as clear strapping tape when it comes to clamping unusual shapes. A good-quality tape can be stretched to its limits and, as its memory makes it try to shrink back to its original size, it draws parts together for a perfect bond. Mitered corners are especially suited to this technique. First, apply a short strip of tape to create a hinge, then spread the glue and close the miter. Finally, stretch the tape across it to draw it tight.



Alone or in concert with other Arts & Craft furniture, the authors' double picture frame adds elegance to the art, the room and the owner's life.