

WOODWORKING SYSTEM

PROJECT BASIC DIFFICULTY

PROJECT TUTORIAL

'Antique' Book Rest

Designed for CarveWright by Michael Tyler - www.carvebuddy.com

This project features a unique antique- style Book Rest with an adjustable pull-out shelf to accommodate a variety of book sizes.

A book rest is often used for holding cookbooks conveniently open while the cook is working in the kitchen, but it is also great when used as a decorative accessory piece for displaying an open Bible, an antique book, or even a small painting!

The finished, assembled book rest/holder (opened) is about 13 "Wx 11 "D x 8 "H. The shelf is removable and the backboard easel assembly folds together for compact storage and/or for shipping.

The project is carved and cut out using just the two bits that were included with your machine - no other bits are required. Main items you will need:

- 1) The Project Files (included):
- Backboard.mpc
- Shelf_Easel_Strips.mpc
- 2) Boards with the following dimensions:

Backboard: .75 " x 11.125 " x 20 " **Shelf, Easel, Strips:** .75 " x 9 " x 26 "

NOTE: Do <u>not</u> use boards that are shorter in length than specified above.

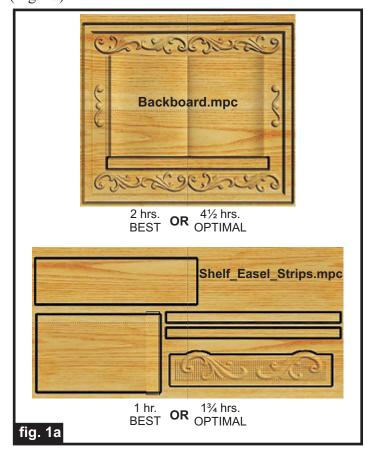
- 3) Hinge for easel (¾" x 4" piano-style) (I used Brainerd hinge # 1264XC from www.hardwareworld.com)
- **4) Self-stick felt from any arts & crafts store** (I purchased felt from Michael's Arts & Crafts)
- 5) Sandpaper, wood glue, wood stain and/or paint and clear finish
- 6) A Dremel-type rotary tool with assorted sanding wheels and bits to sand small details and speed up preparation for finishing.



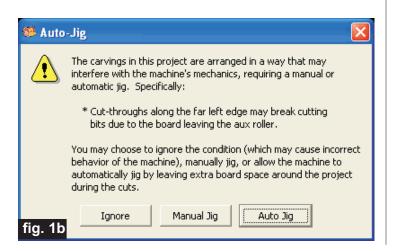


STEP 1

Start your Designer software and open the .mpc files. (Fig. 1a)



All you need to do at this point is upload the project files to your memory card. (File/Upload). You will see a pop-up window that says there is a hidden zero depth Rectangle1. Just click 'OK'. When you continue, you may or may not get another pop-up window with an "Auto-Jig" warning message (Fig. 1b)



If you do see the message, you may safely click on "Ignore" because our actual boards will be large enough that it won't cause any problems at all. After each project is compiled, select "Best" or "Optimal" for the File Quality setting.

Click "OK" and upload each mpc project file to your memory card. Insert the card into your machine and load a board that measures the appropriate dimension specified for each particular mpc (see page 1 for board dimensions). Turn on your machine and proceed with the standard project setup in Step 2...

STEP 2

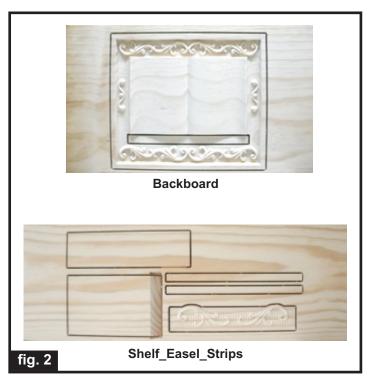
You will see "Project Menu" on your LCD display. Press "1" and scroll to the **Backboard.mpc** project, and press the green ENTER button to select it. Then follow the additional prompts....

- Stay Under Rollers press 1) YES
- DO NOT RESIZE or SCALE the projects! If prompted, always keep the original size. No scaling!
- How To Place press 1) Center
- Cut Board to Size? press 2) NO
- Select Cutting Bit: 1/8" Cutting Press ENTER. The machine will move the bit holder to the center of the machine in preparation for the bit installation.
- Load Bit:1/8" Cutting -Insert your 1/8" cutting bit, then press the green ENTER button. (homes, etc.)
- Select Carving Bit: 1/16" Carving Press the green ENTER button. (Moves to center of machine.)
- Load Bit: 1/16" Carving Remove the 1/8" cutting bit, and insert your 1/16" carving bit, then press the green ENTER button. After homing and finding surface, the machine will begin the carving process.
- After it is done carving, you will be prompted to load your 1/8" cutting bit. Take out the 1/16" carving bit, clean the chuck, insert your 1/8" cutting bit, remove excess sawdust debris, then press the green ENTER button. Cutouts are always performed last, after all raster carving is completed.

(cont.)

STEP 2 (cont.)

- The machine will now proceed to perform the cutout as it moves around the component outline. It leaves little tabs to hold the part in the board. When the machine is finished, remove your board and clean your machine of excess sawdust.
- Repeat the entire procedure for the **Shelf_Easel_Strips.mpc**. When the machine is finished, remove your board and clean your machine of excess sawdust. Your boards will look like this (fig. 2)



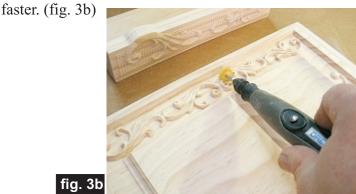
STEP 3

Separate all the pieces from the boards with a utility knife or hobby saw, then sand the tabs off the outside edges of backboard and the two side strips. Glue the strips immediately to the backboard side edges to prevent warping.

Clamp overnight. (fig. 3a)



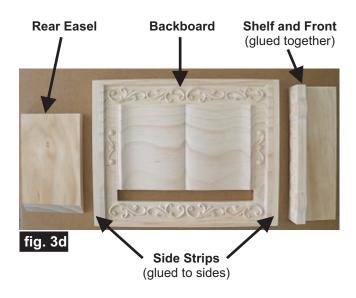
Sand all the components to remove any fuzzies and undesirable tool marks. Use a Dremel-type tool with various abrasive wheels and tips to make the job go



Glue the decorative front to the edge of the shelf and clamp until dry.



Your components will now look like this. (fig. 3d)



STEP 4

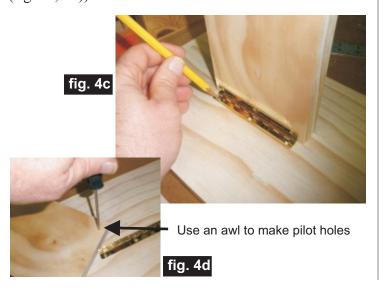
Mark and draw a line across the rear of the backboard, 3 inches down from the top edge. (fig. 4a)



Place easel on the line - stand the easel up on flat end, as shown, with the top at the line. Mark the center of the line and the easel to match up with the center of the backboard. (fig.4b)



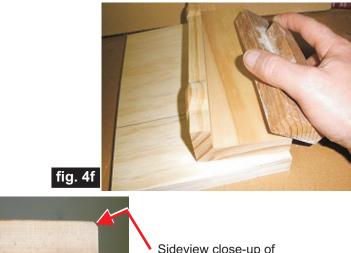
Put the hinge in position and mark the screw locations. Use a sharp awl to make pilot holes for the screws. (fig. 4c, 4d))

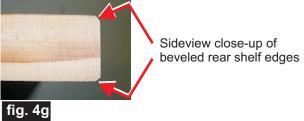


Insert the screws, then remove before applying the finish. (fig.4e)



Create a slight angled bevel on the top and bottom back edges of the shelf using a sanding block. This is to ease the insertion of the shelf into the felt-lined shelf slot later. (fig. 4f, 4g)





STEP 5 - Finishing

Apply stain/paint and clearcoat of your choice. Here's what I used on my Antique Book Rest made from Select Pine:

- one very light coat of thinned Bullseye Sealcoat (2 parts sealer/3 parts Denatured alcohol)
- sanded again with very fine sandpaper & Dremel
- Minwax Colonial Maple stain #223
- one coat Bullseye Amber shellac
- two light spray coats of Krylon clear acrylic
- two coats Minwax water-based Satin Polycrylic

STEP 6 - Assembly

Cut a strip of self-stick felt measuring ½" wide x 11" long. (fig. 6a)



Remove the backing from the felt and stick it inside the slot along the inside <u>top</u> and <u>side</u> edges of the shelf slot (the bottom has no lining). Burnish the felt down tightly to the inside of the slot using a smooth, round rod such as a screwdriver handle. (fig. 6b, 6c, 6d)





Apply a coat or two of paste wax to the shelf sides bottom and top, and also to the bottom edge of the slot. This will help make the shelf slide in and out more easily when adjusting for book thickness. (fig. 6e)

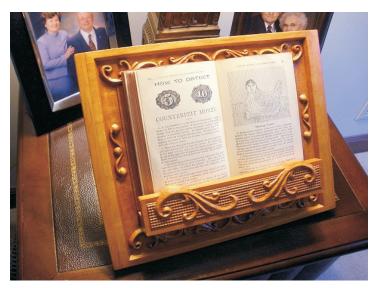


Re-attach the back easel and hinge, insert the shelf, and you're done!

IN CONCLUSION

I hope you have enjoyed your Antique Book Rest project. The project lends itself to creative license on your part, if you like. You can easily substitute your own choice of decorative carving elements on the backboard, instead of the provided scrolls and book pattern background. You can use the original layout as a general guide to the pattern settings (height, depth), placement and so on. Have fun!





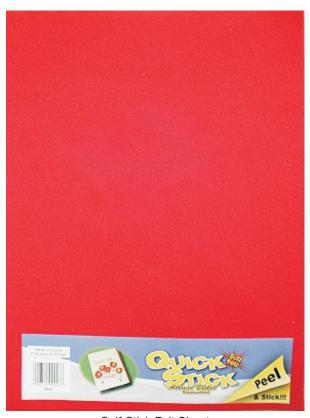
Materials Source Page

• 3M Radial Bristle Discs from www.mcmaster.com

(stack 3 discs at a time on your rotary tool mandrel)

80-grit: part # 4494A19 **220-grit:** part # 4494A18





Self-Stick Felt Sheet from Michael's Arts & Crafts™



Krylon Clear Gloss Acrylic from WalMart™



3/4" x 4" piano-style Brainerd hinge # 1264XC from www.hardwareworld.com

Miscellaneous Items Purchased at Lowes™

- Minwax Stain Colonial Maple #223
- Bullseye Sealcoat, Bullseye Amber Shellac, Minwax water-based Satin Polycrylic
- Denatured Alcohol
- Disposable Brushes and Paint Rags

Additional Resources

RESOURCES...

There are numerous resources for the CarveWright/CompuCarve owner to make their experience with these machines much more enjoyable.

Every owner should join the <u>CarveWright User Forum</u> (http://forum.carvewright.com/index.php) where fellow users share their experiences and knowledge with these machines on a daily basis. It is a FREE service that you will surely appreciate. A handy Search Feature helps you find answers to any questions you may have.

