CARVEWRIGHT

WOODWORKING SYSTEM
™

Vintage Perpetual Calendar

Designed for CarveWright™ by Michael Tyler - www.carvebuddy.com
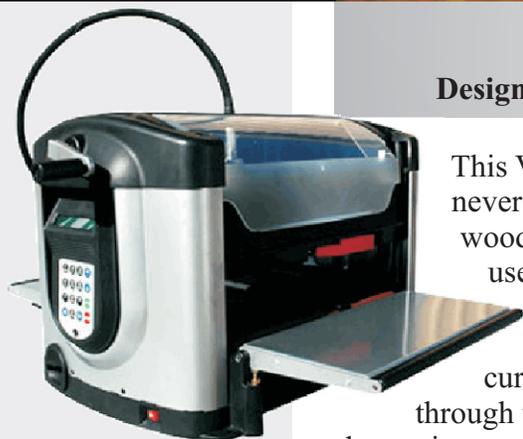
This Vintage Perpetual Calendar never goes out of date! The wooden knobs on each side are used for manually rotating the internal wheel/disc mechanism to display the current day, month and date through the windows on the decorative carved wood front panel. The calendar can be placed on a shelf, table, desk or even mounted on a wall for an interesting addition to any decor.

The project requires no special bits - the main components are carved and cut out with just the two standard bits that came with your machine.
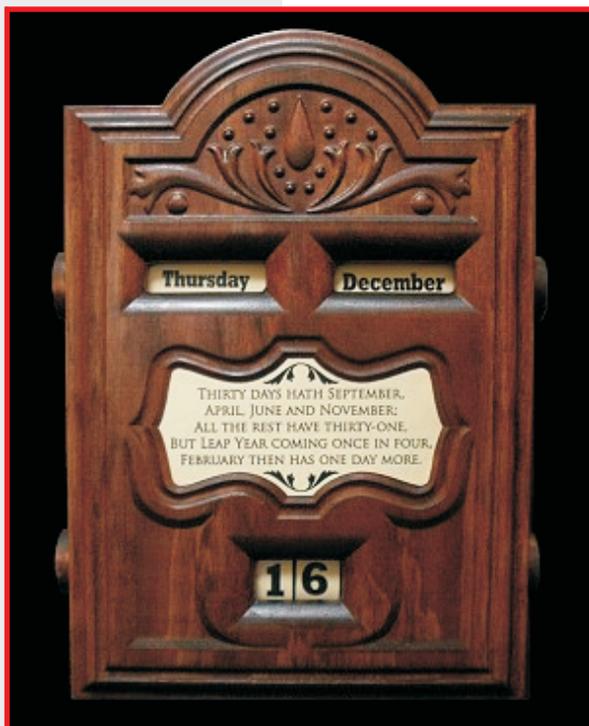
The finished dimensions of the assembled Perpetual Calendar are about 8½ "wide x 11½ "tall x 3½ "deep.

Main items you will need:

1) The Project Files (included):
• Front_Panel_Decorative.mpc
• Discs.mpc
• Side_Panels.mpc
• Knobs_and_Guides.mpc

2) Boards with the following dimensions:
Front Panel: 0.75 "x 11 "x 19 "
Discs: 0.75 "x 9.2 "x 16 "
Side Panels: 0.75 "x 7.2 "x 17 "
Knobs & Guides: 0.75 "x 9.2 "x 25 "
Back Panel/Cover (not an mpc):
1/8" Hardboard dimensions: 6.75 " x 9.125 "
NOTE: Do not use boards that are smaller than specified above.

3) Clamps, drill, small screws, 3/8 "diameter dowels, lightweight card stock, CA Glue (medium and thin), High-tack white glue, self-stick felt sheets, sandpaper, wood stain and/or paint and clear finish

4) 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)

(front) **Front_Panel_Decorative.mpc** **(rear)**
BEST: 2½ hrs. **OR** OPTIMAL: 4½ hrs.

Discs.mpc
20 min.

Side_Panels.mpc
17 min.

Knobs_and_Guides.mpc
I hr. 17 min.
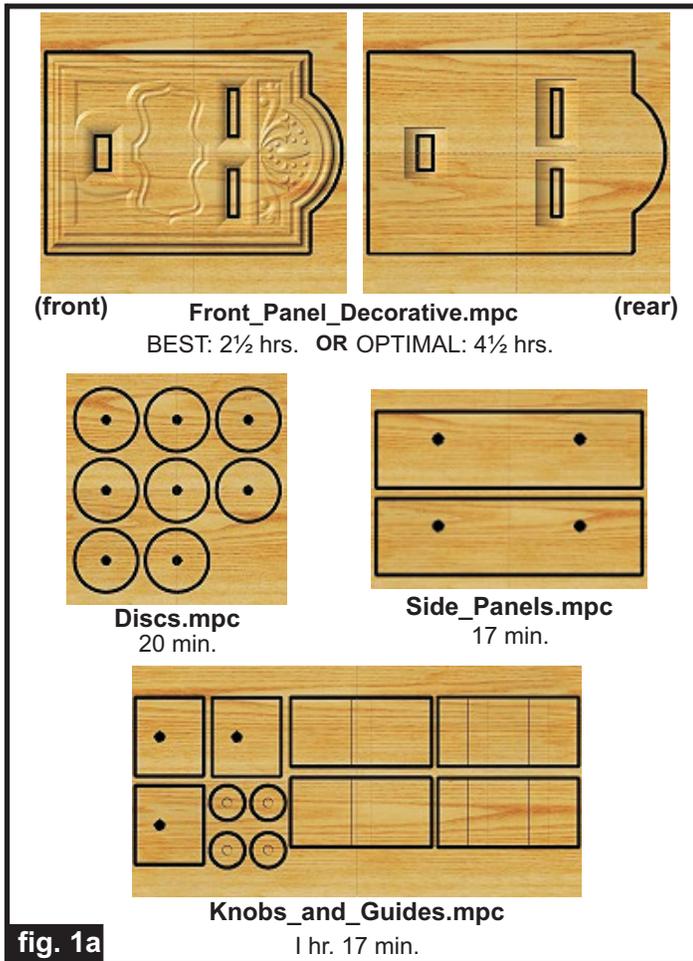
fig. 1a

All you need to do at this point is upload the project files to your memory card. (File/Upload).

During upload, you may or may not see a pop-up window with an "Auto-Jig" warning message (Fig. 1b)


Auto-Jig

The carvings in this project are arranged in a way that may interfere with the machine's mechanics, requiring a manual or automatic jig. Specifically:

* Cut-throughs along the far left edge may break cutting bits due to the board leaving the aux roller.

You may choose to ignore the condition (which may cause incorrect behavior of the machine), manually jig, or allow the machine to automatically jig by leaving extra board space around the project during the cuts.

Ignore   Manual Jig   Auto Jig

fig. 1b

If you do see the message, you may safely click on "Ignore" because the 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 project setup in Step 2...

STEP 2
You will see "Project Menu" on your LCD display. Press "1" then scroll to the **Front_Panel_Decorative.mpc** project, and press the green ENTER button. This MPC is a **TWO-SIDED** carve. The machine will carve the roller recesses on the **BACKSIDE first**. Follow the additional prompts closely....

• **Stay Under Rollers** - press 1) YES

• **Press Enter to Proceed: Board (BACK)** Press ENTER

• **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 Carving Bit: 1/16" Carving** - Press ENTER. The machine will move the bit holder to the center.

• **Load Bit: 1/16" Carving** -Insert your 1/16" cutting bit, then press the green ENTER button. The roller recess carves will be performed.

• **After it is done with the back, you will be prompted to "Please Flip Piece".** Raise the head of the machine to remove and flip the board.

• **Please Load Piece: Board -** Brush off the board, and flip the board over width-wise, top-to-bottom (**NOT** end to end! see fig. 2a). Put the board back into the machine (blank side up) and crank down the head.

fig. 2a **Flip the board over width-wise**

(cont.)

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STEP 2 (cont.)

• Press **ENTER** to Proceed (will measure board again)

• **Select Cutting Bit: 1/8" Cutting** - Press the green ENTER button. The machine will move the bit holder to the center of the machine.

• **Load Bit:1/8" Cutting** - Remove the 1/16" bit and insert the 1/8" bit, then press ENTER. (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 and insert your 1/8" cutting bit. Press the green ENTER button. The machine will now proceed to perform the cutouts as it moves around the component outlines. When the machine is finished, remove your board and clean your machine of excess sawdust.

Proceed to run the **Discs.mpc**, **Side_Panels.mpc** and **Knobs_and_Guides.mpc** . These three MPC's use only the 1/8" Cutting Bit. The bit prompts will ask for a drill bit, vector bit and cutting bit. Just remember - **these are all using the same 1/8" Cutting bit**. Here is the basic procedure as follows...

• Project Menu - press "1"

• Scroll to the **Discs.mpc**, load your board and press the green ENTER button. Then follow the additional prompts....

• **Stay Under Rollers** - press 1) YES

• **DO NOT RESIZE or SCALE the projects!** If prompted, <u>always</u> **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 the green ENTER button. (Moves to center of machine.)

• **Load Bit:1/8" Cutting** - Insert your 1/8" cutting bit, then press the green ENTER button. (homes, etc.)

• **Select Drill Bit: 1/8" Cutting** - Press the green ENTER button again. Nothing happens, since the bit is already installed. The machine will now proceed to drill the holes and perform the cutouts as it moves around the component outlines. When the machine is finished, remove your board and clean your machine of excess sawdust.

Run the remaining two projects... **Side_Panels.mpc** and **Knobs_and_Guides.mpc.** The steps just described are similar for these MPC's but you will see a slight variation in bit terminology and order of prompts for the 1/8" bit.

• When the machine is finished running all the MPC's, clean your machine of excess sawdust. Turn off yourmachine *before* removing the memory card.

Your boards will look like this. (fig. 2b)

(front)   **Front_Panel_Decorative.mpc**   **(rear)**

Discs.mpc   **Side_Panels.mpc**

Knobs_and_Guides.mpc

fig. 2b

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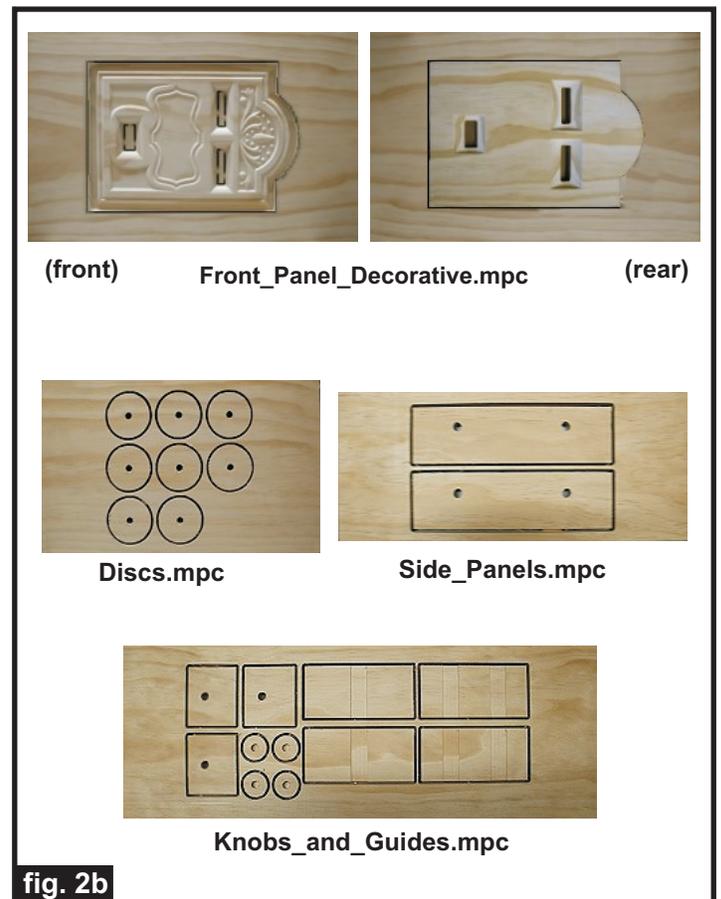
STEP 3

Separate all the pieces from the boards with a utility knife or hobby saw. Sand all the components to remove the tabs, fuzzies and undesirable tool marks. Use a Dremel-type tool with various abrasive wheels and tips to make the job go faster. (fig. 3a, 3b)

fig. 3a

fig. 3b

STEP 4

Cut the 3/8" diameter dowels into four $3\,^{7}/_{8}$" lengths. Glue 3 discs together with <u>MEDIUM</u> CA glue (a type of super glue) and slip them onto two of the dowels allowing $^{3}/_{8}$" to protrude from <u>one</u> side of each 3-disc glue up. (fig. 4a)


fig. 4a

Clamp the glued discs together. (fig. 4b)

Now apply <u>THIN</u> CA glue to the seams of the discs <u>and</u> where the discs contact the dowel on each side. The thin CA will flow into the tight seams even when clamped. Let set for a few minutes until the CA has cured.

TIP: *You may need to "ease" the dowel diameters with sandpaper to slid them through the disc drill holes. The fit should be snug.*

fig. 4b

Glue the other two dowels **flush** with each single disc (i.e., - the dowel protrudes from just <u>one</u> the side of each single disc.) Remove the clamps from the 3-disc roller assemblies and sand the surfaces smooth. Sand the single discs surfaces smooth as well. **TIP:** *I chucked up the longer dowel end into a portable drill, then held a sanding block against each roller while running the drill.* (fig. 4c)

fig. 4c

The glued roller assemblies look like this. (fig. 4d)

fig. 4d

Apply your choice of stain to the long ends of each of the four dowels at this time. (fig. 4e)


fig. 4e

(cont.)

STEP 4 - cont.

Assemble the inner roller supports as shown and glue with CA MEDIUM and THIN. (fig. 4f) The dowel holes are biased to the front of the enclosure. Do NOT glue in the left bottom dowel support block yet!

Do Not glue this support in yet
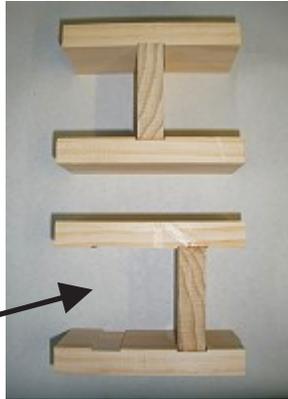
STEP 5 - Apply Finish Now

Finishing must be done before the final assembly. Apply stain/paint and clearcoat of your choice to the front, top *(one of the single dado pieces)*, bottom *(one of the double dado pieces)*, sides and knobs. (fig. 5a, 5b)

Here's what I used on my Vintage Perpetual Calendar made from Select Pine:

• Minwax oil-based Red Oak stain #215
• 3 coats of Krylon Crystal Clear Acrylic spray
• 2 coats Minwax water-base Satin polycrylic (brushed)

fig. 5a

fig. 5b

STEP 6 - Roller/Text Paper Strips/Felt Circles

Print out the roller numbers, days and month strips on lightweight card stock or other fairly stout paper using a laser printer. Your office supply store can print those for you from a copy of this PDF if you do not own a laser printer. I used an Ivory-colored card stock, but you can choose whatever color you like. A nice parchment paper will give a more "antique" look.

Lightly spray a couple coats of clear sealer to both sides of the printouts. I used Krylon Clear Gloss spray. (fig. 6a)

fig. 6a

Cut out the strips and text (just inside the lines). A single-edge razor and a metal ruler works well for cutting out the strips. (fig. 6b, 6c)

fig. 6b

fig. 6c

Slightly trim the strip ends, if necessary, to form a neat butt-joint (no overlap). Glue the strips around the rollers using High-tack white glue. (fig. 6d, 6e)

fig. 6d

fig. 6e

(cont.)

Trace 5 large circles and 4 small circles onto the backside of your felt self-stick sheet. Cut out the felt circles and apply them as shown. (6f, 6g, 6h)

fig. 6f

fig. 6g

Felt Circle

Top View Assembly Guide

fig. 6h

Felt Circle

Felt Circle

Felt Circle

STEP 7 - Assembly

The parts must be assembled in a specific order, as follows...

Insert the Month and 0-9 rollers (right side) into the support assemblies. (fig. 7a)

fig. 7a

Apply CA MEDIUM to the right side of the supports and glue the right side panel on. Clamp the left side (DO NOT GLUE the left side yet) for a few minutes until the glue sets. (fig. 7b)

fig. 7b

Remove the clamps. Insert the left side rollers (the Day and 0-3 rollers) as well as the last dowel support into the dado. Apply CA MEDIUM to the contact points of the left side panel. Clamp for a few minutes until the glue sets. (fig. 7c, 7d)

fig. 7c

fig. 7d

Glue on the knobs and front panel. (fig. 7e)

fig. 7e

STEP 7 - Assembly (cont.)
Glue the text paper insert on the front panel using High-tack glue. (fig. 7f) Apply a final clear coat to protect the paper. Glue the front panel onto the main assembly.

fig. 7f

Screw on the 1/8" hardboard back panel. Drill pilot holes for the screws. (fig. 7g)

fig. 7g

IN CONCLUSION
I hope you had fun creating your Vintage Perpetual Calendar and that you'll enjoy it for many years to come - it never goes out of date!

Happy Carving!

Michael
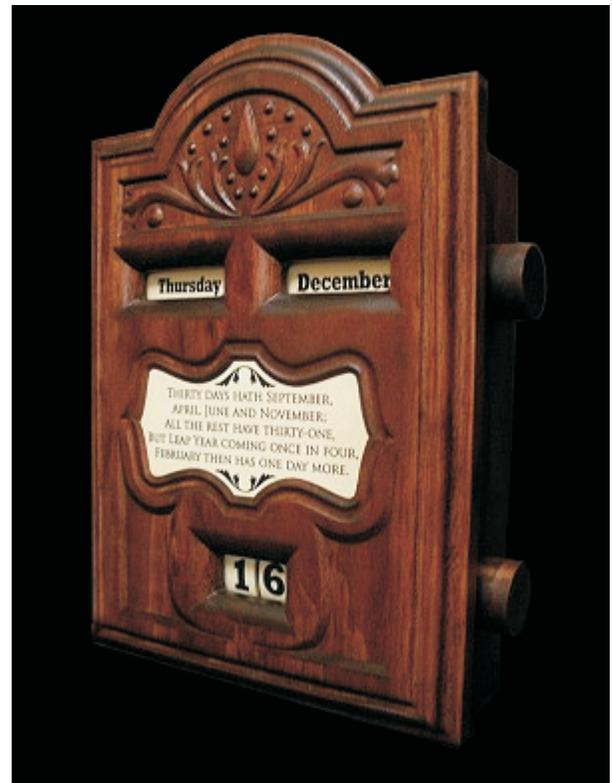
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Print this on a Laser Printer

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(extra set)

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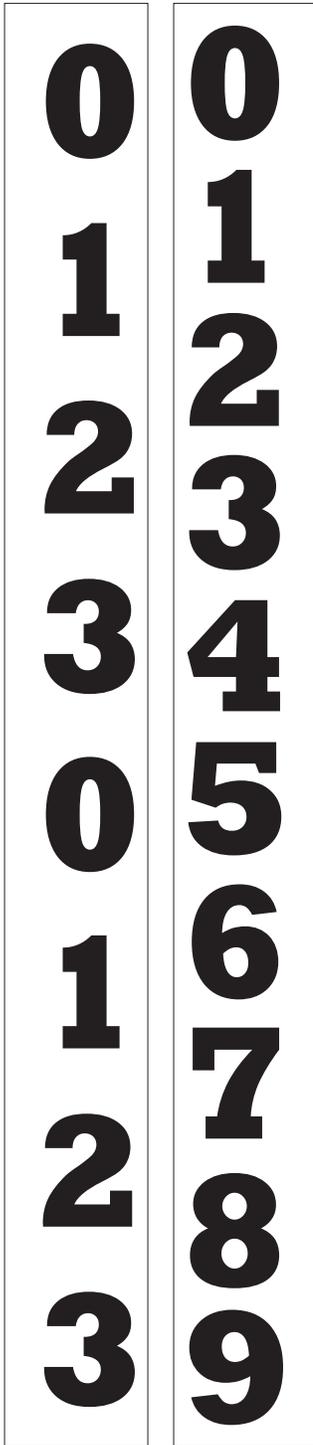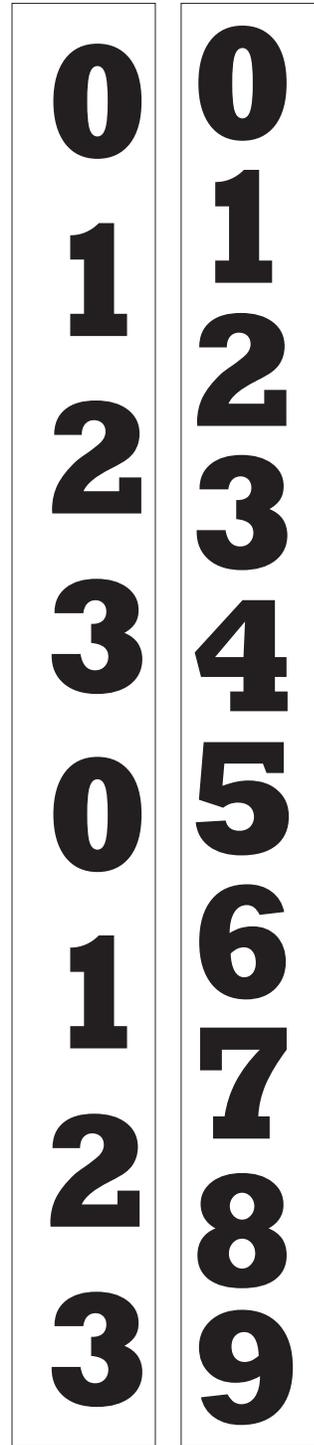
⟵ View WINDOW Size

Date
Roller Strips

Print this on a Laser Printer

Sunday	January
Monday	February
Tuesday	March
Wednesday	April
Thursday	May
Friday	June
Saturday	July
	August
	September
	October
	November
	December

← View WINDOW Size

Days of the Week Roller Strip

12 Month Roller Strip

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Felt Circle Cutting Templates
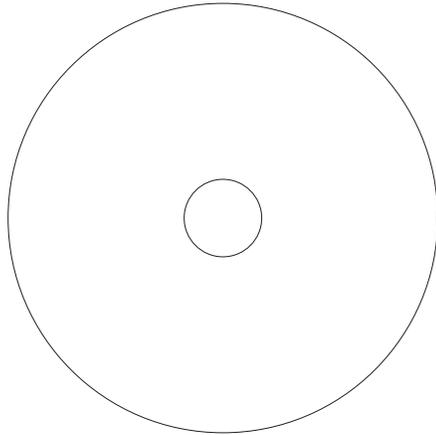
Trace and
Cut out 5 of these
from your felt
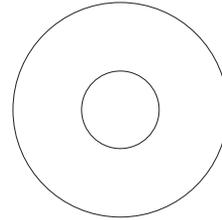
Trace and
Cut out 4 of these
from your felt

Text Panel Applique

Print this on a Laser Printer

THIRTY DAYS HATH SEPTEMBER,
APRIL, JUNE AND NOVEMBER;
ALL THE REST HAVE THIRTY-ONE,
BUT LEAP YEAR COMING ONCE IN FOUR,
FEBRUARY THEN HAS ONE DAY MORE.

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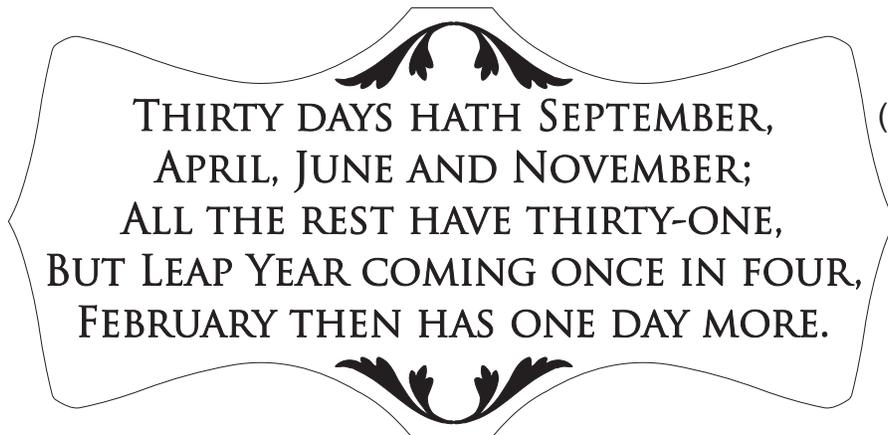
(one extra)

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

• **TiteBond CA Wood Adhesive (thin & medium),**
  and CA Activator from www.rockler.com

Miscellaneous Items Purchased at Michael's Arts & Crafts™

• **Self-stick Felt Sheets**
• **Aleene's Fast Grab High-Tack Glue**

Miscellaneous Items Purchased at Home Depot™

• **Minwax Red Oak Stain #215**

• **Minwax Water-based Clear Satin Polycrylic (quart can)**

Miscellaneous Items Purchased at Lowes™

• **Select Pine boards and 3/8-inch Diameter Dowel**

• **Disposable Brushes and Paint Rags**

• **Small Brass Wood Screws**

Krylon Clear Gloss Acrylic
from WalMart™

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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 CarveWright User Forum (http://forum.carvewright.com/forum.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.
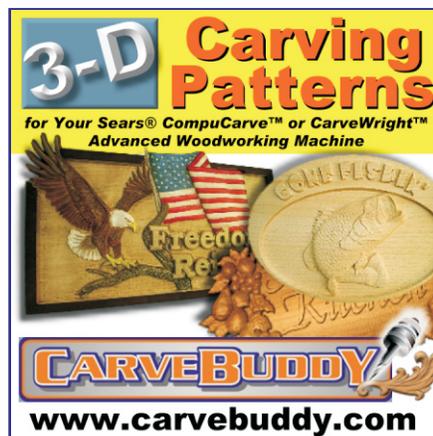
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