HARP DESK KIT
Assembly Instructions

Updated December 2020

WOOD PARTS

- ☐☐ a) shelf rack (back panel)
- ☐☐ b) shelf ledge
- ☐☐ c) 2 wedges
- ☐☐ d) 2 wedge caps
- ☐☐ e) swivel block
- ☐☐ f) bracket - front
- ☐☐ g) bracket - left side
- ☐☐ h) bracket - right side

HARDWARE

- ☐☐ knob with stud
- ☐☐ (2) 1/4” washers
- ☐☐ (2) biscuits
- ☐☐ adhesive felt, 3/4” X 5”
- ☐☐ (5) tiny nails
- ☐☐ (5) cork pads
  - (2) 1/8” thick
  - (3) 1/4” thick
- ☐☐ (1) harp medallions -1-1/4” diameter
- ☐☐ medium rosette
- ☐☐ assembly instructions

Musicmakers
14525 61st ST CT N
Stillwater, MN 55082

BEFORE YOU BEGIN

____A. Inventory and inspect all your parts carefully. If anything is missing or defective, please call us right away. **651-439-9120**

____B. It is a good idea to read through the entire assembly instructions before you start, just to get an overview of the project.

A NOTE ABOUT GLUE

We strongly recommend that you use a common woodworking glue like Elmer's Carpenter's Wood Glue or Titebond because they hold the parts more securely than most other adhesives, and they are inexpensive and easy to use. DO NOT assemble the wood parts of this project with 5-minute epoxy or super-glue or hot melt glue. The yellow colored Elmer's or Titebond is best.

When gluing parts together, be sure to put enough glue on the joint to wet the entire surfaces to be joined. A good sign of proper gluing is that a little excess will squeeze out around the joint when clamping pressure is applied. Too little glue may cause the parts to separate later, whereas too much glue makes things messy. Always keep a damp rag handy for quick cleanup, as necessary. It is especially helpful to keep your fingers clean while gluing, because gluey fingerprints have the embarrassing tendency to appear on the finished product in prominent places.

ASSEMBLE THE SHELF

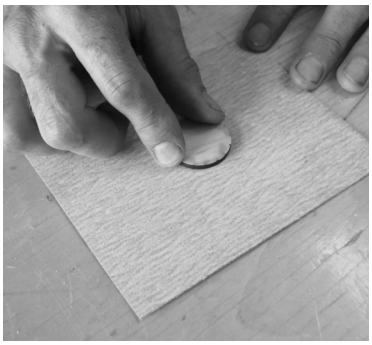

FIG. 1

___1. Sand off the burn residue on the front face of the harp medallion using a medium sandpaper (180 grit). Make sure you follow the grain direction while sanding. (fig. 1)

Put a little dallop of glue on the back of medallion (you can use superglue or woodworking glue for this), and place it in the shallow hole on the shelf. (fig. 2) You can use a piece of painter's tape to hold the medallion down while the glue sets.

FIG. 2

___2. The decorative shelf rack panel should fit easily in the groove of the shelf ledge, as shown in fig. 4 (next page). Test it without glue first, making sure the shelf and ledge fit together nicely. The side with the medallion may face either way--your choice.

Lightly sand the shelf and ledge smooth before gluing as it is easier to reach the inside corners before they are assembled. Use medium (180 grit) sandpaper and sand in the direction of the wood grain. Do not sand too much, as you will risk sanding through the veneer.

___3. When satisfied, blow or wipe off the dust and glue these two parts together with wood glue as shown. (fig. 3) Squirt 2-3 thin lines of glue on the inside of the ledge to secure the shelf rack to the ledge. Make sure some glue squeezes out as you push the parts together. Use a wet rag to clean up the excess glue so it won't show on the wood surfaces.


FIG. 3

Make sure that the bottom of the shelf is fully inserted into the ledge, so that bottom of the shelf is touching the bottom of the inside groove on the ledge.

There are a number of methods to clamp the shelf and ledge together while the glue sets.

If you have bar clamps available, this is the best way to ensure a tight bond. However, you will want to use a piece of cork or felt to protect the top edge of the shelf. (fig. 4)


FIG. 4

You can also use plastic wrap to secure the shelf to the ledge. (fig. 5) Painter's tape another option. When using painter's tape, make sure you tape down both sides of the ledge, so the shelf sits flat along the bottom, ensuring a tight bond.


FIG. 5

___4. Glue the large piece of cork to the flat side of the swivel block using standard woodworking glue and a couple of spring clamps or some weights. (figs. 6 & 7)

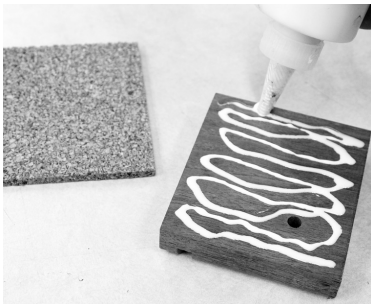
FIG. 6

It is important to clamp the cork against a flat surface to avoid denting the softer material with your clamps. It is also helpful to place wax paper or thin plastic film under the cork to keep from gluing it to your work surface. Glue can squeeze through the pores of the cork and adhere to the wood below.

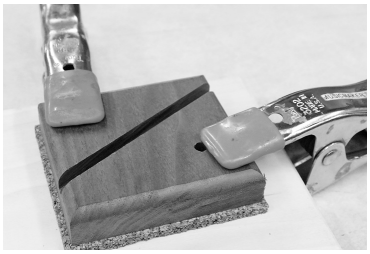
FIG. 7

___5. After the glue is dry (about 1 hour), sand off the excess cork around the edges of the wood and use a 1/4" drill bit to open the hole through the cork. (fig. 8)

Sand the swivel block using 180 grit sandpaper.

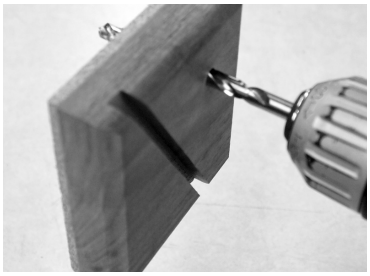
FIG. 8

___6. Attach the swivel block to the right side of the plywood rack, just above the shelf (fig. 9)

Make sure the hole for the bolt is showing on the side of the rack where your music will be. The plywood should fit fully into the slot of the swivel block.

Glue the parts together with wood glue. Some glue should squeeze out of the joint as you push the parts together. Use clamps, tape, or weights to hold the parts together. Be sure to clean off all the excess glue from the wood surfaces.

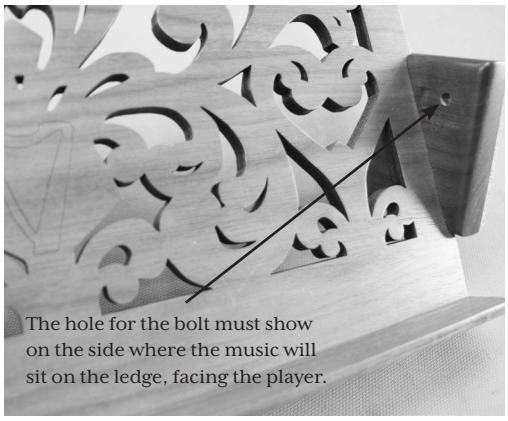

FIG. 9

PREPARE THE WEDGE CAPS

CAUTION: The wedges and bracket parts are a bit complex, so please work slowly and carefully, paying close attention to detail.

___7. Glue a strip of 1/4" thick cork to one face of each wedge cap. (fig. 10) Normal wood glue works fine for adhering the cork. Spread a thin layer over the surface of the wood.

CAUTION: If you use too much glue it will squish through the cork and adhere to your work surface, so don't overdose on the glue! Place a piece of wax paper or thin plastic between the cork and your work surface to prevent gluing this assembly to your table.

Turn the wood over onto the cork, centering it so some cork shows all around the edges. Use weights or clamps to press the cap down against the cork. (fig. 11)

___8. When dry, you can sand off the excess cork around the edges. (fig. 12) This is a good time to sand the sharp edges of the wood a little too, just to make the caps smooth.

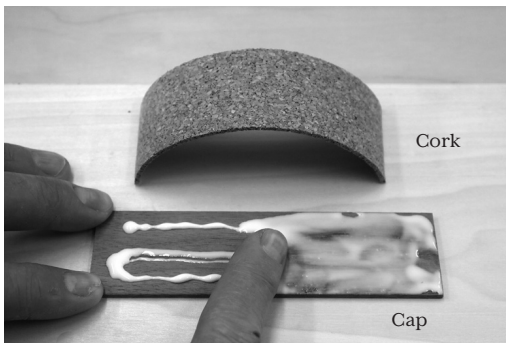

FIG. 10

FIG. 11

FIG. 12

PREPARE THE WEDGES

___9. Orient the wedges with the narrow face upward and tap two tiny nails partway into the wood as shown in fig. 13 (Avoid nails near the bottom of the slope.)

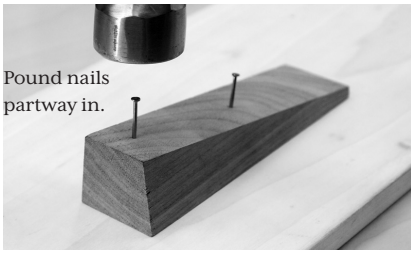

FIG. 13

Clip the nails off close to the wood surface so just a bump of metal pokes up,(fig. 14) enough to make a dent in the adjoining piece when you press them together.

FIG. 14

Carefully center the narrow edge of the wedge onto wood face of the cap and use a hammer to tap the parts together (fig. 15), making impressions in the cap piece, as shown. (fig. 16) Use some scrap wood to protect on top of the wedge so you don't end up with hammer divots!

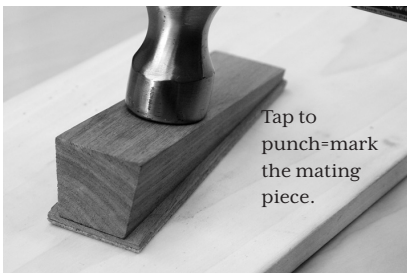

FIG. 15

NOTE: The Cap piece is meant to be wider than the Wedge! Don't sand it flush on the sides; the overhang is what holds the Wedge from falling out of the desk bracket when you are installing and removing the Harp Desk on your harp.

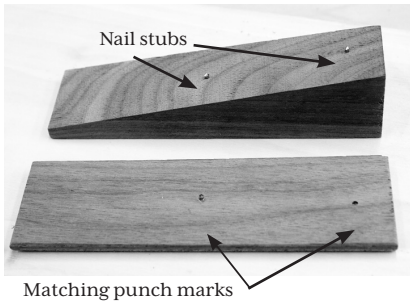

FIG. 16

___10. Spread glue on the narrow face of the wedge (where the nail stubs are) (fig. 17) and then carefully place the parts together so the nail stubs fit into the depressions in the cap piece. Press the parts together firmly. Spring clamps work well for holding the joint tightly until the glue dries. (fig. 18)


FIG. 17

NOTE: It is best to lay the cork on a flat work surface when clamping so you don't dent the cork as you clamping pressure. Some glue is likely to squeeze out around the edges; you can clean that up with a wet rag while the glue is still wet. It's hard to sand off the dried glue later because of the overhanging edge. Use a wax paper barrier to prevent adhering the assembly to the work surface.

FIG. 18

ASSEMBLE THE CORK IN THE BRACKET SIDES

___11. The two pieces of 1/8" thick cork are meant to be glued into the slots cut in the bracket sides. Test fit the cork into these slots and trim if necessary. Minor fitting can be done by sanding the edge of the cork with 100 grit sandpaper. Notice that the cork will cover the hardware embedded in the wood. (fig. 19)

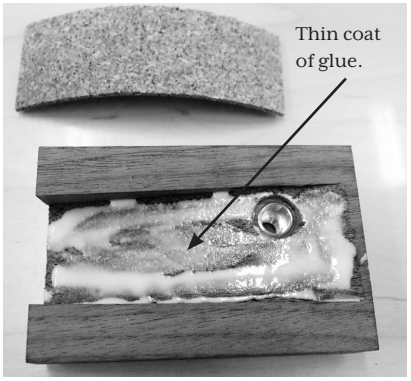

FIG. 19

When the cork fits, try sliding a wedge into the slot to cover the cork. The wedge can only be slid into the slot one way; with the thick end of the wedge going into the shallow end of the slot. (fig. 20)

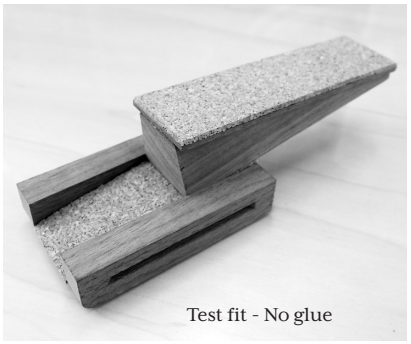

FIG. 20

___12. If all fits nicely, proceed as follows to glue the cork in place:

a. Cut a small piece of wax paper or plastic bag to use between the cork and wedge. This will protect the wedge from becoming stuck in the slot in case excess glue squishes up through the cork.

b. Apply a thin coat of glue to the bottom of the slot in the bracket side. (fig. 19) Then push the cork down against the glue, lay your plastic or wax paper shield over the cork and slide your wedge back in place.

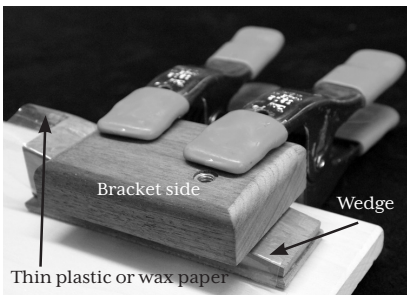

FIG. 21

c. Check to make sure the cork has not been pushed out of position. When ready, apply pressure to the wedge until the glue is dry. (fig. 21)

Again, to prevent dents, don't press clamps directly on a cork face.

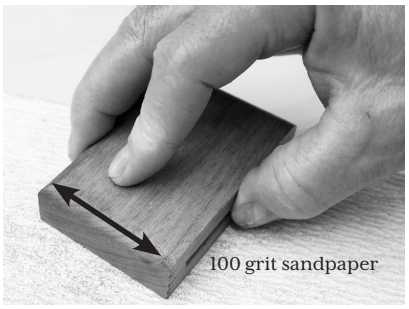

FIG. 22

d. When dry, sand off the excess cork that protrudes from the ends of the slots. (fig. 22 & 23) We like to tape (or glue) a sheet of 100 grit sandpaper to the work surface with the rough side up so you can just rub the wood piece until the cork is level with the wood.

___13. Repeat this process for the other side.

FIG. 23

INSTALL THE BISCUITS AND ATTACH THE BRACKET SIDES

___14. Test fit the two sides to the front of the bracket, using the two biscuits in the pre-cut slots. You may need to sand the surface of the biscuit a little to get a good fit. You want it to be a snug, but not a forceful fit.

FIG. 24

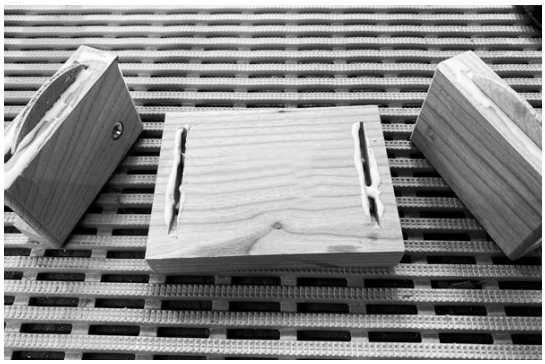

FIG. 25

___15. When satisfied with the fit and orientation, put glue on both sides of half of one biscuit. Insert that half into the slot in the bracket side. Then apply glue to both sides of the exposed half of the biscuit and on the flat edge of the bracket piece. (figs. 24 & 25)

Join the bracket sides and the front pressing the parts firmly together.

Use clamps or heavy weights to hold the parts in alignment until dry. (fig. 26)

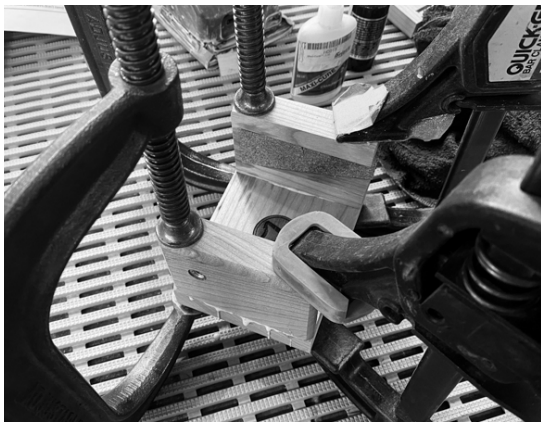

FIG. 26

___16. Use a wet cloth to remove excess glue that squeezed out around the seams. Wrap your cloth around a screwdriver tip or pointed awl to help you clean the inside corners of the joints. (fig. 27) Allow at least 2 hours to dry completely.

FIG. 27

FINAL SANDING AND FITTING

___17. Take your time to inspect all the glue joints for glue blobs or smears. Use 180 grit sandpaper to sand any glue residue you find. A sharp chisel might help for chipping off blobs that are located in tight corners.

Sand all parts to round over all edges a little, smoothing the sharp corners. A rounded edge looks and feels much nicer than a sharp edge. Use 180 grit sandpaper to make quick work of this, sanding with the wood grain whenever possible.

FIG. 28

___18. Test the wedges in the bracket to see how they slide. They don't need to be loose, but you want to be able to slide them up and down in the slots easily. Remember that the large end of the wedge slides down into the slot from the top. The caps that you glued to the wedges are meant to keep the wedges from dropping out of the bracket when not engaged on your harp.

Notice how the wedge "hangs" in the bracket when it slides all the way down. The cap prevents it from falling out the bottom. (fig. 28)

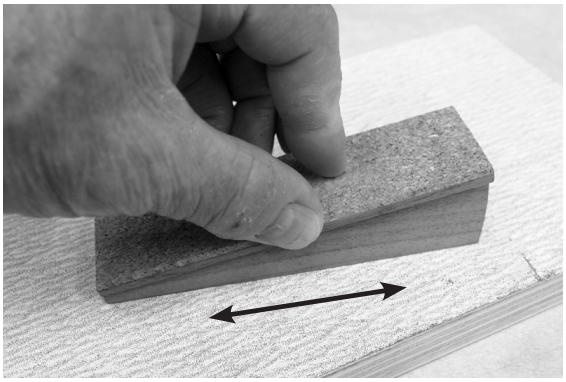

FIG. 29

If the wedges don't slide easily, you can sand the wood face opposite the cork. This is easiest if you lay a piece of 180 grit sandpaper on your work table with the rough side up, and then rub the wedge against it to sand evenly. (fig. 29) Sanding the non-cork part of the wedge will make it slide more easily in the dovetail slot. No need to sand the dovetail sides. You do not want to alter the angle of the dovetail.

___19. Now is a good time to test the fit the bracket on the pillar of your harp. The bracket is meant to sit on the pillar with the rosette facing forward. (fig. 30) However, some harps have a wide T-Brace on the front of the pillar making this configuration unworkable.

If you can't install the bracket from the front, you'll need to make a simple modification so you can mount it from the string side. (fig. 31)

If you need help visualizing this, check out our video online titled "Will this Harp Desk Fit My Harp".

You can find the video here:
www.harpkit.com/harp-desk

To make the modification you'll need to get:

3/16" drill bit (fig. 32)
1/4 - 20 tap (fig. 32)

These tools are readily available at any hardware store. (We don't supply them with the kit, because it would raise the price, and most customers don't need them.)

Mark a point on the right bracket side that is centered 7/8" from the top and front edges (fig. 33). This means the hole will be very close to the glue seam, and that is fine.

Drill the hole 1" deep (the hole will show partially on the inside). Then switch to the tap and operate the drill very slowly into the hole. Carefully reverse the drill bit back out again so you cut clean threads without stripping them out.

Do not use a drill press for this step. It will not stop turning when the tap reaches the bottom of the hole. A cordless hand drill with forward and reverse works well, though you can also just turn the tap by hand with a T-handle. Wood is quite easy to thread this way.

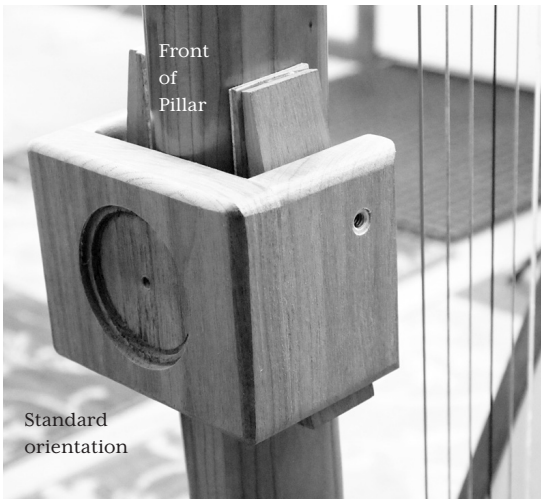

FIG. 30

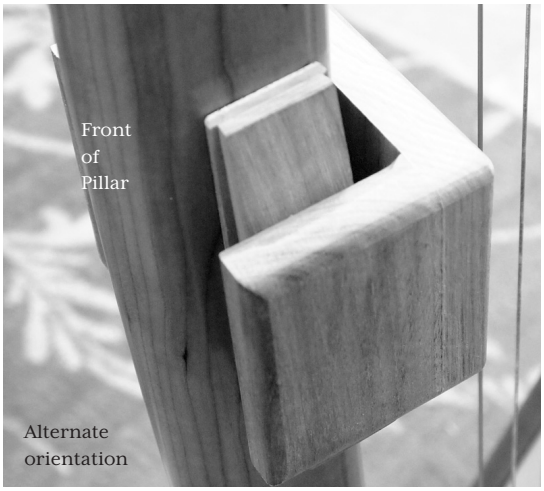

FIG. 31

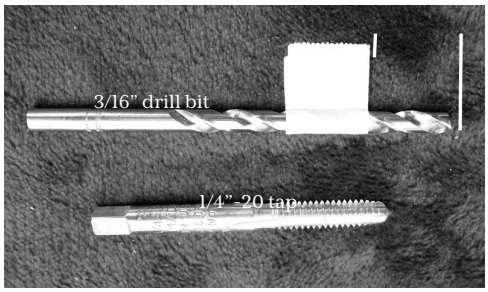

FIG. 32

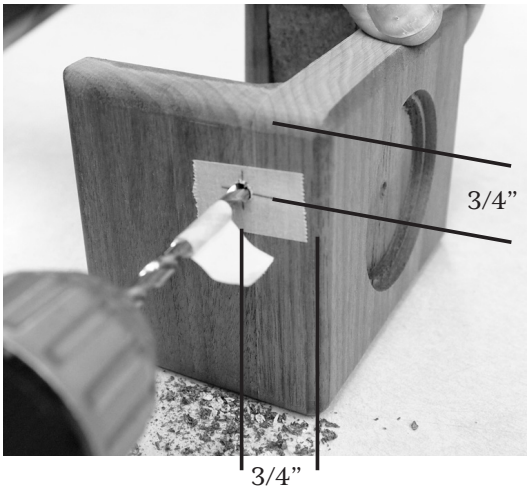

FIG. 33

___20. Lightly sand the rosette and install it in the front of the bracket. Test-fit it into the hole. If it is a bit oversize, use 100 grit sandpaper to sand all the way around the edge of the rosette until it fits nicely.

If your rosette needs to be oriented upright to look correct, the top of the bracket is where the "points" of the wedges are aiming when the bracket is on your harp. (fig. 34)

Once the rosette is in the proper position, apply woodworking glue to the narrow ledge that it will sit on, and press the rosette into place.

FIG. 34

APPLY A FINISH

When satisfied with the operation of the wedges and the fit of the bracket on your harp, you may apply the finish of your choice to all the wood surfaces.

Here are some suggestions for finish:

OIL -- An oil finish (such as Watco Danish Oil) will give your wood a low luster appearance, bringing out the natural color of the grain, but it tends soak into the wood and appear dry and "thirsty" after awhile. The principal advantage of an oil finish is that it can be applied and wiped dry immediately, allowing you to proceed to using the piece right away. The disadvantage of oil is that it usually does not give much surface protection or sheen, unless it also has wax or varnish mixed with it.

POLYURETHANE -- Any polyurethane will work fine on this project, but we like the solvent-based ones better than water-borne versions. The advantages of this finish are its simple application (no drips or runs), durability, and deep, soft luster.

LACQUER -- Many professional instrument makers still use nitro-cellulose lacquer for their finish. The most readily available lacquer is called Deft Clear Wood Finish. If you choose this product, it is best to purchase a can of liquid (such as Shellac) to brush on as a sealer coat first, and then use an aerosol can of Deft to spray the final coats. The advantage of this finish is its quick drying time, but the disadvantage is the strong odor and toxic lacquer fumes.

SHELLAC -- Zinsser Company makes a good clear shellac that we often use as a base coat to soak into the wood. The advantage of shellac is its quick drying time and easy cleanup with denatured alcohol. This is a time-honored finish that is being revived and made available again after many years of being superceded by polyurethanes. Just be careful to thin it out enough to prevent clotting up on the wood as you apply it. The consistency should be like water, not cream.

IMPORTANT: Cover the cork faces with masking tape so you don't get finish on those surfaces. Then go ahead, choose your weapon and proceed with finishing all the wood parts.

___21. When the finish is dry and smooth, apply the adhesive felt strip inside the bracket in two halves to protect from scratching your harp when installing and removing the Harp Desk. (fig. 35)

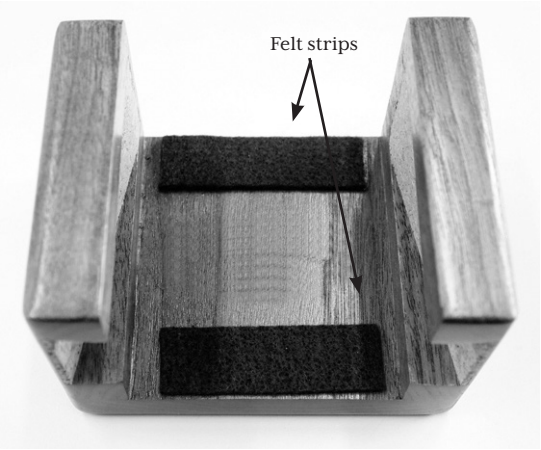

FIG. 35

Then you can install the Harp Desk at whatever height is best for you on the pillar of your instrument.

Use the black knob with 2 washer to fasten the ledge assembly to the bracket (fig. 36) and to adjust the tilt of the music so it does not fall off when you tip the harp back on your shoulder.

FIG. 36

Let us know if you have any difficulty fitting the bracket firmly to your harp. We will be happy to help troubleshoot the issue with you.

Congratulations! You did it. We hope you enjoyed the project and get many years of use out of your Harp Desk.

NOTES:

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