

Adjustable Hammered Dulcimer Stand



Musicmaker's Kits

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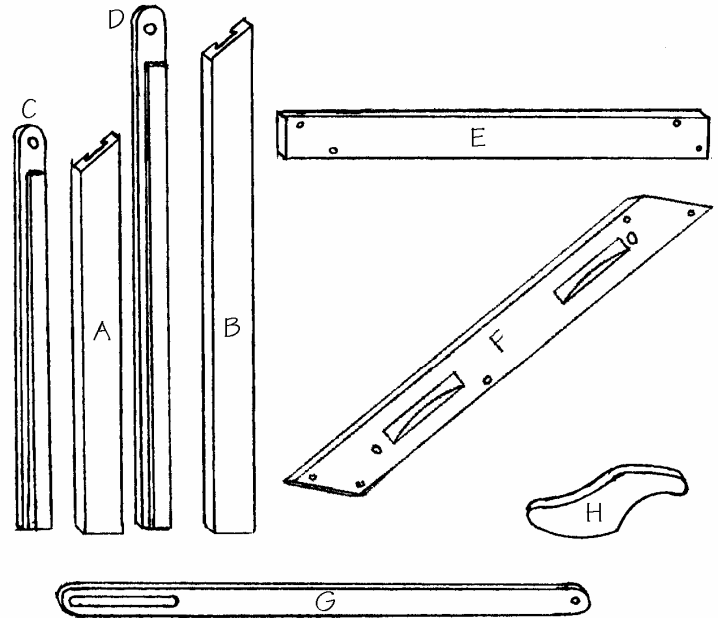
PARTS LIST:

1 Set of Assembly Instructions

- A. 2 front legs (1 right, 1 left)
- B. 2 back legs (1 right, 1 left)
- C. 2 front slides *
- D. 2 back slides *
- E. 2 bottom rails
- F. 2 clamping rails (1 right, 1 left)
- G. 2 top rail
- H. 4 clamping cams

- 4 wood knobs
- 4 carriage bolts (1/4" X 4")
- 4 washers (1/4")
- 1 nylon cord (20")
- 4 ft brown felt strip
- 16 wood screws (1-1/4")
- 2 spring hinges w/screws
- 4 wood pegs
- 4 in rubber hose, 3/8" ID
- 4 tee-nuts (1/4 X 20)
- 2 dowels (3/8" X 2")
- 4 wood plugs (3/4" diameter)

ADJUSTABLE HAMMERED DULCIMER STAND



*Please note that the front and back slides have been inserted in the front and back legs for shipping purposes.

BEFORE YOU BEGIN

Please take the time to check over the parts of your kit now, to make sure everything is there. If you discover a problem, call us right away so we can rectify it quickly without causing you much delay in your project. We also suggest skimming through the entire directions before beginning, just to get an overview of the project.

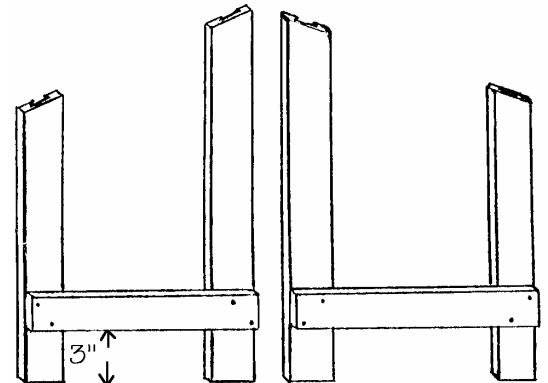
INSTRUCTIONS

1. Use a sanding block with medium (120 grit) sandpaper to round over the sharp edges of all the wood parts before assembly.

2. Caution: many parts to this kit are deceptively similar to one another. Be extremely careful to position all the parts according to directions, or you will have a stand that does not function properly.

A) Begin with the two **BACK LEGS**. Position them next to each other so the points of the tops line up together, and the dovetail slots are facing down, as shown:

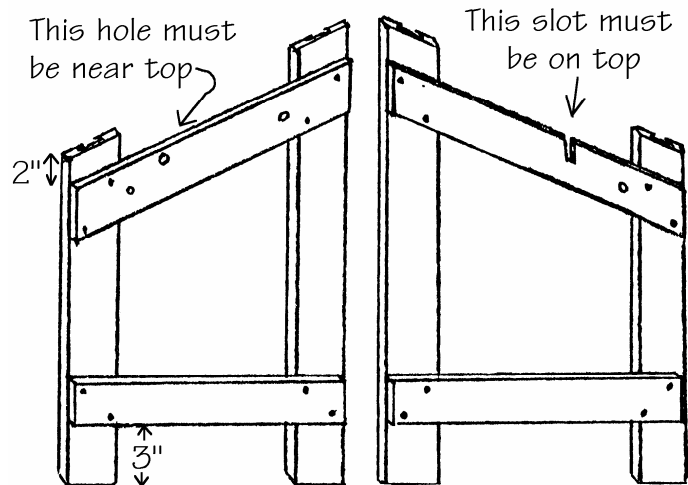
B) Position the two **FRONT LEGS** on either side of the **BACK LEGS**, so the sloped ends match those of the **BACK LEGS**, with the slots facing down.



C) Position the **BOTTOM RAILS** 3" from the square bottoms of the **FRONT & BACK LEGS**. Do not fasten in place yet -- just lay them in position for now.

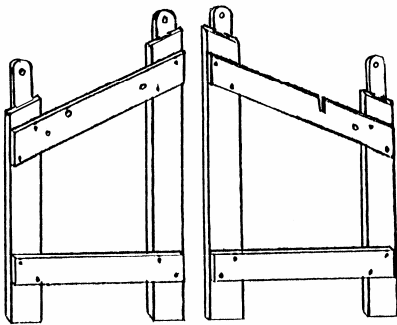
D) Position the **CLAMPING RAILS** 2" from the angled tops of the **FRONT & BACK LEGS**, with the wide dado slots facing down, and the angles matching the legs.

E) Use a square to make sure the frame is not crooked.

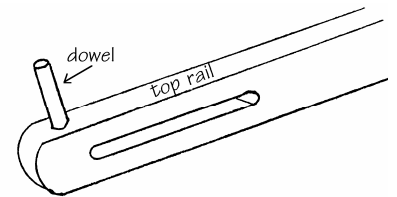


When you are satisfied that all parts are positioned correctly, you may fasten those parts of the frame together with glue and the wood screws provided. **HINT: It may be helpful to drill pilot holes for the screws before inserting them.**

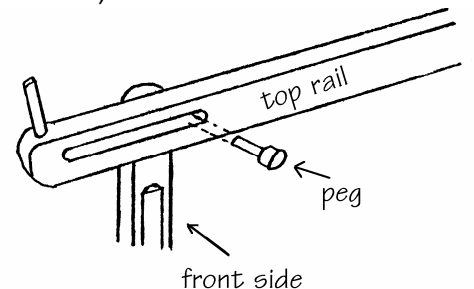
3. Insert the two **FRONT SLIDES** into the **FRONT LEGS** so the rounded ends protrude above the tops of the legs. Insert the longer **BACK SLIDES** into the **BACK LEGS** in the same way. (There is no right or left for those sliding parts.)



4. Locate the two short **DOWELS** in the parts bag and round over the ends with sandpaper. Glue them into the pre-drilled holes near the slotted ends of the **TOP RAILS**.



5. Position the two **TOP RAILS** on the **SLIDING RAILS** so that the slotted ends (where you glued the **DOWELS**) are above the **FRONT LEGS**. The **TOP RAILS** are identical, so it does not matter which is right or left. Place the **WOODEN PEGS** into the holes and slots of the **TOP RAILS**, as shown.



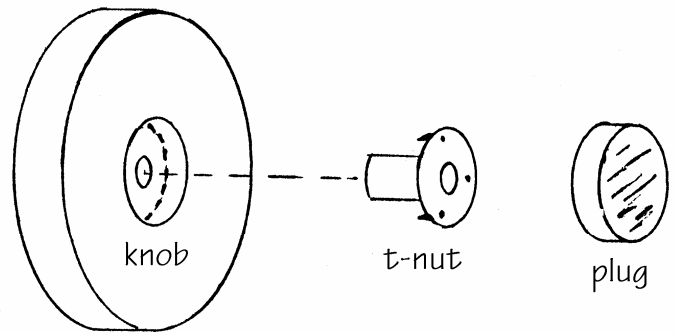
the **WOODEN PEGS** into the holes and slots of the **TOP RAILS**, as shown.

6. Trim off any excess length of the **WOODEN PEGS** if they are too long. You want the **TOP RAILS** to remain free to swivel and slide.

___ **7.** Glue the **WOODEN PEGS** into the front and rear **SLIDES**, being careful to use enough glue without making a mess. We use a nail to wipe glue around the inside of the hole before inserting the peg.

___ **8.** Install the four **T-NUTS** into the **WOOD KNOBS**, as shown. Cover the **T-NUTS** with the four **WOOD PLUGS**, using a drop of glue on each to make sure they don't fall out of the **KNOBS**.

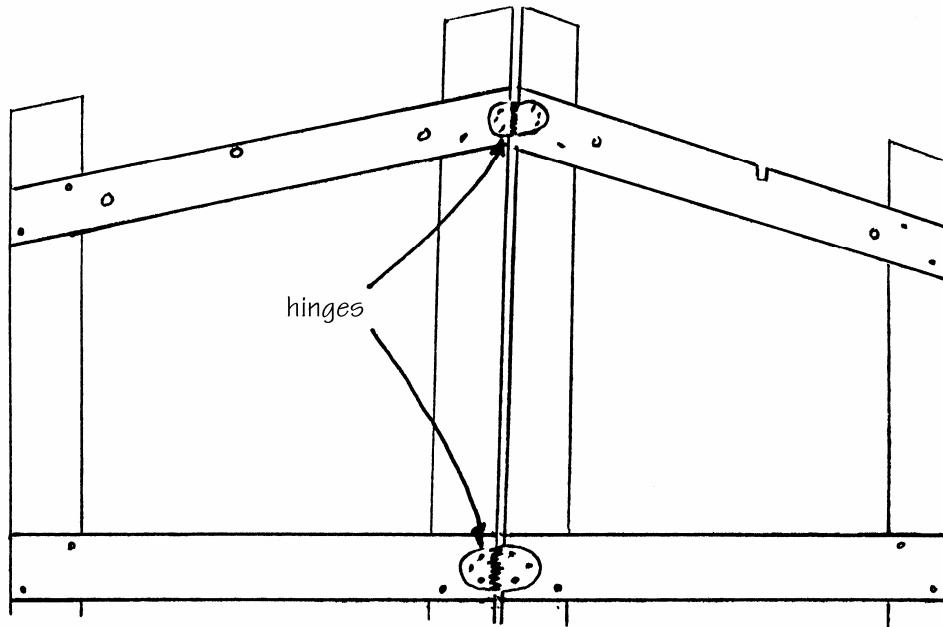
___ **9.** Use medium (120 grit) sandpaper to sand the **WOOD PLUGS** flush with the surface of the **KNOBS**.



___ **10.** Sand all parts with fine (180-220 grit) sandpaper to remove scratches, and then apply your finish. Two coats of clear varnish or lacquer works well, sanding between coats with even finer (320 grit) paper to remove hairs and rough spots.

Remove the sliding parts from the stand for easier finishing. Be careful not to gum up the sliding surfaces with too much finish. Allow plenty of drying time (overnight) before putting the parts back together so they don't get stuck with soft varnish....

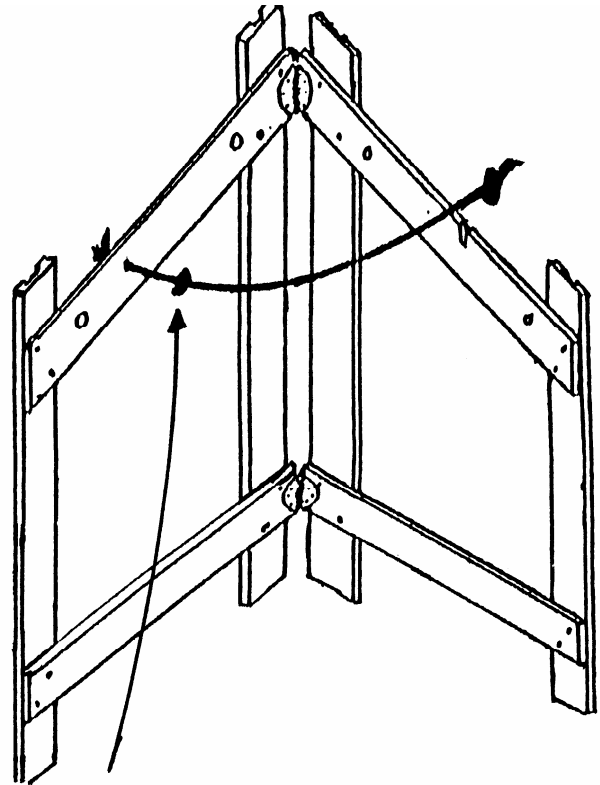
Don't forget to finish the **WOOD KNOBS** and the **CLAMPING CAMS** too.



___ **11.** Before sliding the movable parts back into the stand, install the spring-loaded **HINGES** to the **BACK LEGS**. Actually, the hinges fasten to the **RAILS** instead of the legs, as shown.

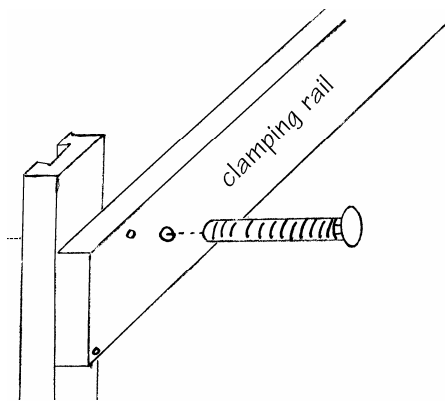
NOTE: You may not be able to insert all the hinge screws, as the wood screws underneath may get in the way. It will be fine if you can put two screws into each leaf of the hinges.

___ **12.** The hinges want to spread the stand wide open, so you need to attach the **NYLON CORD** between the **CLAMPING RAILS** to hold the stand to the desired angle. Simply tie a knot in one end of the cord, thread the other end through the hole in the rail, starting on the outside of the left **RAIL**, and pull the **CORD** all the way through so the knot rests against the wood.



Then tie a knot near the other end of the **CORD** and test the length by slipping it into the slot on top of the opposite **RAIL**. Adjust the placement of the knot as necessary to hold the stand open to the desired angle.

HINT: We also like to tie a knot very near the left **RAIL** so that it holds the stand in a closed position for easy carrying.



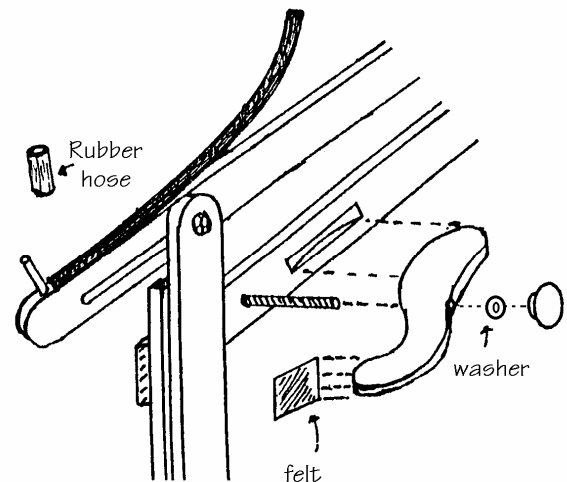
___ **13.** Insert the four **CARRIAGE BOLTS** into the **CLAMPING RAILS**, and tap the heads of the bolts firmly against the inside surface of the **CLAMPING RAILS**.

___ **14.** Slide the movable parts into place in the stand (there is no right or left, but make sure the shorter **SLIDING RAILS** go into the **FRONT LEGS**).

___ **15.** Cut brown felt strip and rubber tubing to fit on the

TOP RAILS, as shown, to protect your hammered dulcimer.

___ **16.** The **CLAMPING CAMS** are all identical, so they will fit into any of the four positions. Fit them over the **CARRIAGE BOLTS** so the curved base fits into the dado slots in the **RAILS** and the "fingers" make contact with the **SLIDES**. Screw the **WOOD KNOBS** onto the **CARRIAGE BOLTS** with washers to hold the **CLAMPING CAMS** tightly against the wood. Add a scrap of left-over brown felt to each "finger-tip" for extra grip.



CONGRATULATIONS! I hope you had no difficulty assembling this rather complicated piece of equipment, and that you enjoy putting it to use. It should give you many years of good service.

A FEW HINTS ON USING YOUR NEW STAND

1) We like to set the height of the **SLIDING RAILS** while the stand is held in a closed position. That way it is easy to tell that both sides are extended to the same height

2) Be sure to tighten the **WOOD KNOBS** firmly to ensure stability of the stand, but take care not to overdue it, as the wood is rather soft. If you happen to break a **CLAMPING CAM**, just call us for a replacement.

3) When setting up for playing from a seated position, we find it best to raise the **FRONT SLIDES** to a point just above the knees. Then raise the **BACK SLIDES** to a height that provides a good playing angle for the instrument. You may discover, as we did, how nice it is to play a dulcimer that is held at a rather steep slope. Most stands hold the instrument more nearly horizontal, requiring you to bend over while playing. Try a steeper slope and see how you like it!

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