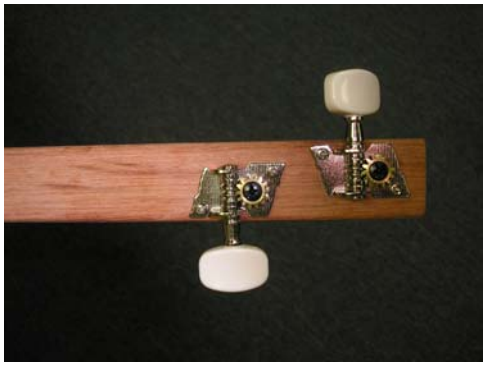
Stringed Veena Replica, India

Materials
Strong Hardwood 2' long, 1.5" wide, .5" thick
Short piece 1/8th inch dowel
Short piece 3/16th inch dowel
4 tiny eyescrews
2 string tuning peg machines (like on a guitar, you can get them at a good guitar store.)
Gourd resonating chamber, your choice size/shape
2 guitar or cello strings
Copper wire
White glue
Hand drills and saws, sandpaper.

1 Cut a piece of strong hardwood to approximately 2 feet long and 1.5 inches wide. Sand the sides and corners until smooth to suit your taste. As the back of the neck of most string instruments is slightly rounded, you may choose to round yours out slightly. You may stain this wood if you choose, using polyurethane or glossy coating will make this neck too slippery, so don't do that.

2. Approximately 1" from the top end of the neck, drill holes for tuning screw pegs. Hold the machines to where you want to place them, mark with a pencil and drill a hole that is big enough for the tuning peg to turn freely, but not so large it rattles around. The machines will probably not fit directly across, you'll have to put one in front of the other. Mark and drill tiny holes (on the back side) for the screws that attach the pegs to the back of the neck. Be carefull not to drill all the way through the wood as the holes on the front side will be ujnsightly. (I did this by accident, doesn't look nice does it. I'll find a way to hide them with my decorations though.) Insert and secure tuning machines.



3. 1.5 inches from the tuning pegs, use a small hack saw to create a tiny groove to set the nut (1.5" piece of the 1/8th" dowel) in place. The strings will run from the tuning pegs over this dowel and to the dowel that is the bridge. You don't want the strings to vibrate from the tuning pegs all the way to the bridge. A wooden nut and bridge will give a sweeter sound. Use white glue to secure the nut in place.

4. Cut a groove at the other end of the fingerboard approximately 2" from the end for the bridge (a 1.5" piece of the 3/16th dowel).

6. Drill two tiny holes side by side 3/4th of an inch past the bridge centered with 3/8th"between them. These are very tiny so you can then use these holes to screw in the tiny eyehooks. These eyehooks will hold the end of the strings.

7. Drill two more tiny holes on the other side of the fingerboard in between the nut and the tuning pegs and screw in the tiny eyescrews. The strings will pass over the nut and go through the eyescrews before winding around the tuning pegs. The eyescrews should be screwed into the wood as far as they can go, and maybe even flattened down a bit. It is necessary for the eyescrews to pull the strings down onto the nut.

8. Cut a narrow rectangular hole in the side of your gourd, slightly wider than the neck you've created. Clean out the inside of the gourd. A wire scraper or a grapefruit spoon is a good tool. If the dried seeds and pulp don't come out easily fill the gourd with water and let it soak for a while until it is soft, it will come out. Really, it will, it doesn't take that long.

Use sand paper or and electric palm sander to smooth out and shape the hole in the gourd.

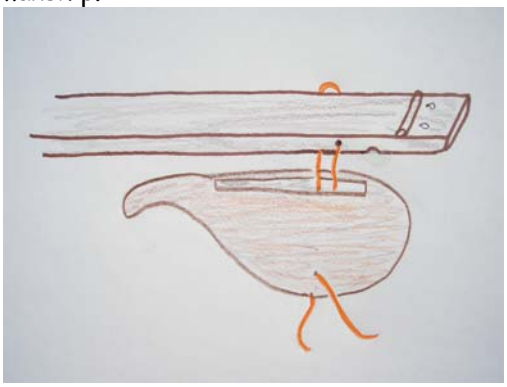
9. Stain and decorate the gourd, you may want to incorporate some small drilled holes in the top of the gourd to help let out the sound. Be careful not to drill holes in places where they will compromise the strength of the gourd.

10. Drill two small holes on the back side of the gourd, (the part that will lean up against your belly when you play it,) approximately 1.5 inches apart. You will run wire through the neck and through the back of the gourd to secure the neck and gourd together.

11. Now you must fit the neck into the opening of the gourd. You may want to cut a groove in the back of the fingerboard to fit the edge of the gourd.

12. Once you've fit the fingerboard and gourd together, mark and drill two holes a hole in that will fall into the opening of the gourd.

13. Run the copper wire up through the bottom of the gourd, through the sideways hole in the neck and back down through the gourd and out the other hole. Now you can twist the wire closed and this should hold the gourd tightly to the neck. Depending on the size and shape of the gourd, one wire probably won't be enough. Use wire in two or more places on the fingerboard and gourd. Use your own judgment and craftsmanship.



14. String ball-end guitar or cello strings through the eyescrews near the tail end, up over the bridge, over the nut, through the low eyescrews and into the tuning pegs. Tighten. You may choose what strings and pitch you like best. I prefer to tune to a fifth, using a D string and an A string, that way I can play a drone of an open fifth, or play a major scale easily.

15. You might want to sew a cozy carrying case for your veena, a pillowcase would work ok. But make sure to keep it safe, if the gourd gets too dried out it can crack. Also, if you are not going to play this instrument for a while, make sure you loosen the strings so the fingerboard does not bend with time and pressure. This instrument may be played as a drone with a bow, or notes may be stopped on the fingerboard for a full scale and more. Use a bow or a pick to sound the notes.