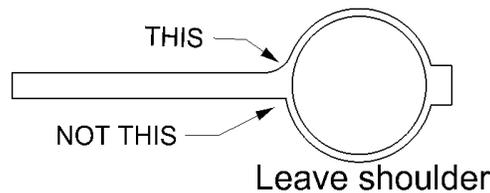


Dipper Demo

1. Start with a 3"+ square blank about 12" to 14" long, depending on your lathe's swing. Adjust as necessary so that your handle, less one half of the diameter of your dipper ball, will fit inside your swing radius.
2. Mount the blank between centers and turn to near the final diameter selected for your "ball". Mark the center of the ball and each end. Leave enough waste on the ball end for the live center on the tail stock. Turn the ball as close as you can to a sphere. Oval shapes will result in thin walls on the ends or sides.
3. Be sure to leave enough wood between the ball and handle to strengthen the point where the handle intersects the ball.



4. Sand the ball and handle. Cut the head end off with a parting tool.
5. Make the jam chuck: Select wood that is about one-half inch larger than your ball and about 4 to 6 inches long. Place between centers, turn to round, make tenon.
6. Hollow the inside of the jam chuck to the diameter of your ball. Leave a slightly tapered opening to allow entry of the ball. Cut slots for the handle and tenon on the ball end or cut the tenon completely off and round to the ball diameter.
7. For added flexibility hollow the jam chuck nearly to the tenon and thin the walls to the point that they will be slightly flexible. Turn a flat, shallow groove about 1/2" wide as close to the entrance as possible. Cut the slots for the handle and tenon and then slice the cylinder into about 6 or 8 segments almost to the chuck tenon with a bandsaw.
8. Add a large hose clamp to the groove previously cut with the dangling end in a trailing direction. Reduce the length of the clamp if necessary.
9. Hollow the dipper: Mount the jam chuck and insert the dipper ball. The handle should be nearly vertical but you can tilt it away or toward the headstock to make the opening tilt relative to the handle.
10. Start the lathe at a low speed and slowly increase until you know the dipper is secure. A bright colored tape on the handle will help remind you that sticking your hand in its path will cause some hurt but also ruin your work.
11. Hollow as you would a small bowl. Check the wall frequently by using calipers or gages. A slot that you have cut for the handle or tenon provides an opening for the gage.
12. Sand the inside.
13. Finish the dipper! If you are going to actually use it, bare wood is good. Using it for liquids will require a epoxy coating(s).