

Cup and Ball Toy Design

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This is a simple turned toy design that you can make for the annual braai. The design comes from **Woodturning Traditional Folk Toys** by Alan and Gill Bridgewater, published by Sterling in 1994. (ISBN 0-8069-8708-1).

This is a well-researched book that gives the background for each toy, and detailed instructions for making them. Fifteen toys of increasing complexity are described, with details on painting for each. In attempting to make the instructions for each toy stand alone, there is quite a lot of repetition so that a beginner can follow the instructions. Most of our turners could probably make this toy from the picture alone, so I have only reproduced the essentials.



In the late sixteenth century the craze for playing cup-and-ball swept across France and the rest of Europe. (Detail taken from a contemporary print)

Apparently, the cup and ball toy (Bilboquest) illustrated in this picture was enjoyed around the world in various forms, by many different cultures.

This photograph from the book shows the finished and painted toy. Depending on the wood used, you may decide not to paint it. If you do paint it, make sure that the paint used is safe – lead-free!

(Even today, to save costs, some enamel paints are still made with lead! You may recall a recent scandal with some local toy manufacturers being supplied with paint containing lead, and only after tests on the paint was this stopped. Even varnishes may contain lead.

Some “driers”, used as a catalyst to speed up polymerisation of the oils to solidify, contain lead. This is why Woodoc explicitly labels their products as lead-free.)



The drawing below shows the construction of the cup. The ball can also be turned on the lathe using cup centres as Roy Gibbs showed us in a demo in 2003.

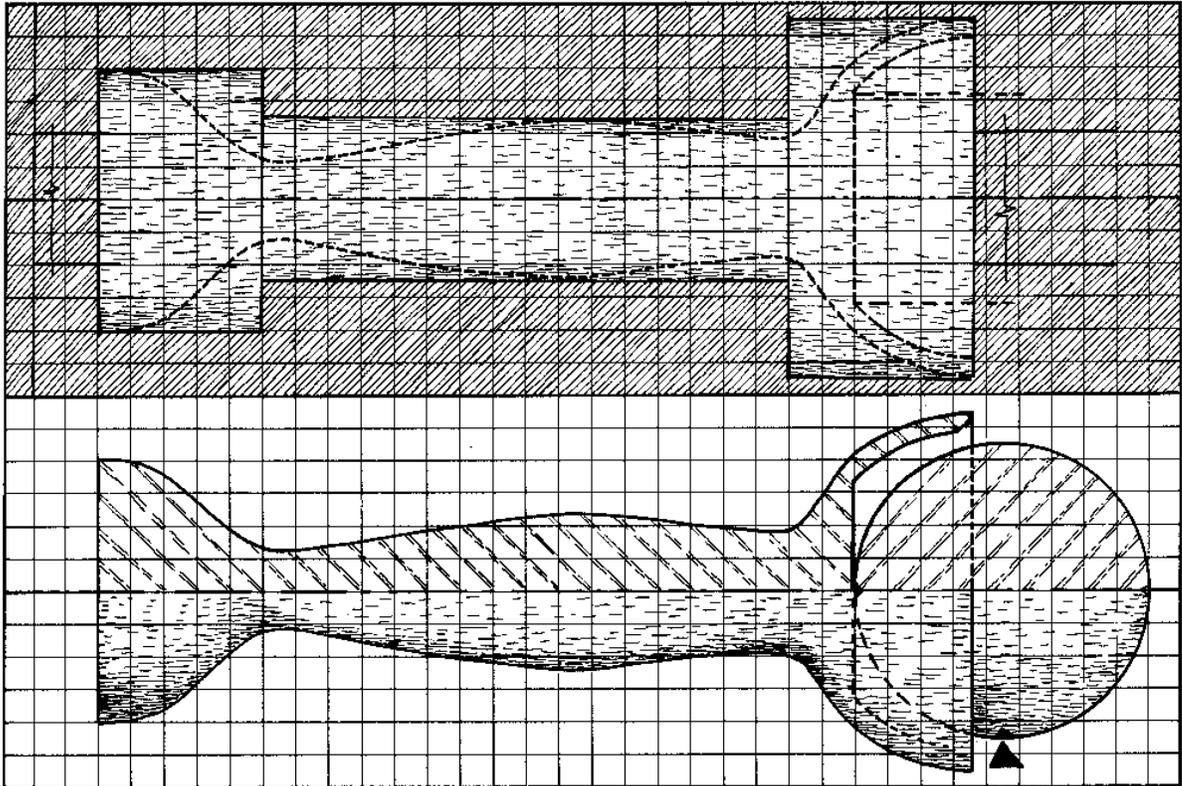
Start with a blank of about 225mm long by 70mm square for the handle, longer (300mm) if the ball is to come from the same piece. Jacaranda or a similar close-grained wood is probably best. Don't use anything that you are not sure about such as walnut or tamboti as this item may find its way into the mouth of a small child, to be chewed and sucked.

The whole item can be turned between centres, however hollowing the cup end will be quicker if the base end is held in a chuck.

To turn it between centres, rough out and shape the outside, with the cup at the tailstock end. Then hollow out the cup last. Leave the smallest pip that you can for support by the tail centre.

Finish the item by sanding it and painting or varnishing it. Once you have finished the item, you can part off the remainder of the tail centre and tidy up the inside of the cup by hand.

To make it using a chuck, rough out a cylinder from the blank between centres. Then turn a spigot on the end that will become the base for gripping in the chuck. The size of this will depend on your chuck. Then mount the spigot in the chuck and support the other end using the tailstock. Turn the outside and sand it as required. Then remove the tailstock support and hollow out the cup. Be careful as you will be working at the end of a long cantilever, and a catch will probably dislodge the piece from the chuck, or at best make it wobble excessively! Finish up by parting off the base from the chuck and finishing with paint or varnish as desired.



7-2 Working drawings—at a scale of four grid squares to one inch, the total ball-in-a-cup game stands about eight inches high and is $2\frac{3}{4}$ inches wide across the diameter of the cup.

Drill a hole in the ball for the string and attach the two pieces with a length of string – they don't suggest a length in the book.

(Acknowledgement: This design comes from **Woodturning Traditional Folk Toys** – details above. My copy was bought from a second-hand book shop, so I am not sure if it is still available locally. You could try amazon.com.)