

Simple SCA Jousting “Lance” Design by Sir Wulfric Peverel

This paper is intended to give the readers a basic “how-to” to build a simple and quick lance for SCA style light jousting. My SCA persona’s are all earlier period, so the elaborate lances of later periods are not appropriate. The lance was designed and built around the idea to make it as close to a simple spear as possible. The net effect is that it is very simple, quick and cheap to construct and is very light. It does require your lance hand to be armored according to your kingdom rules. It is designed to use the 2” diameter 4’ cardboard tubes with the 1/8” sidewall.

Materials Needed:

- ü 45” of 1.5” diameter closet pole or round banister material
- ü 2 ¼ x 2 ¼ piece of scrap 2”x4” material (or some 2xX material)
- ü 2 PVC Sleeves, Home Depot bar code # “12871 62503”. These sleeves/couplers are about 2 ¼” in length, have a 2” outside diameter (OD) and about 1 5/8” inside diameter (ID).
- ü Wood Glue
- ü Epoxy
- ü Scrap paper or cardboard

Tools Needed:

- ü Heavy duty drill or drill press
- ü 1.5” hole saw drill bit
- ü 2 1/2” or larger hole saw drill bit
- ü Hole saw adapter
- ü Clamp (optional)
- ü Sandpaper
- ü Pencil



Hole Saw



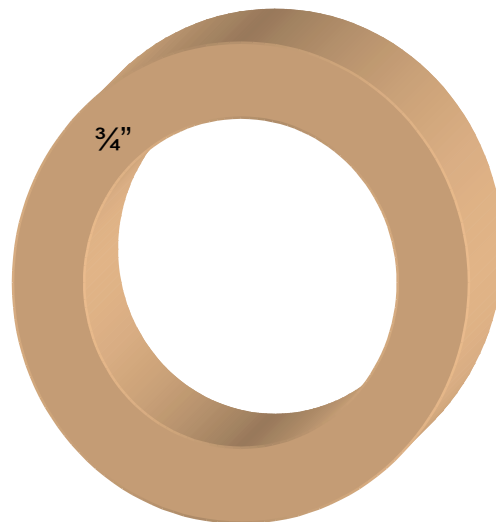
Hole saw kit with adapter

All materials and tools are readily available at Home Depot, Lowes, Ace, etc. The most expensive investment (aside from the drill) will be the 2 hole saw drill bits to make the “donut.” They run about \$12 and \$22 dollars respectively. They are much cheaper from online sources (about ½ price). Remember the hole saw diameter is the outside diameter of the hole saw. The inside diameter or circle of material cut out from the hole saw will be about ¼” smaller. You possibly could use a jigsaw or lathe, but this may be more trouble than it is worth. Make sure your hole saw adapter has a center guide drill. The hole saw adapter will attach to your hole saw and then you can chuck the entire assembly into your drill.

All wood items are of pine, although ash or some other material would work equally as well. The total cost to make the lance, excluding the tools and assuming you have a scrap piece of 2x4 or 2x8, etc. is about \$7.00.

Steps:

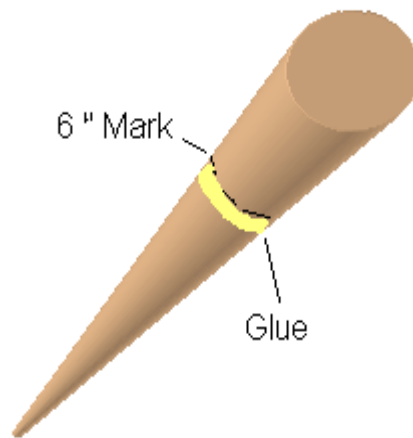
- If your closet rod is not already at 45" you will need to cut it down. Once at 45" take your sandpaper and lightly sand one end of the rod to make the edge rounded and smooth.
- Attach your larger hole saw, with adapter, to your drill or drill press. Then clamp your 2x4 material to some base or table so it overhangs and you are able to drill completely through the 2x4 without hitting anything underneath. Drill out a circle of wood from the 2x4 with your larger hole saw. Be careful when using the hole saws, as they have a lot to chew through and create a great deal of torque. This will give us a round piece of stock of about 2 ¼" diameter with our 2 ½" hole saw.
- Now chuck up your 1.5" hole saw using your adapter. Use the adapters drill guide to guide through the guide hole previously made on our round piece just cut from the 2x4. This will insure that your smaller hole is centered within this round piece. Drill out the center of the round piece of stock. What we have done is make a "donut" or sleeve with a width of ¾" or more (assuming we used the 2 ½" hole saw previously). The height of the donut will be 1.5" which is standard thickness for a 2x4.



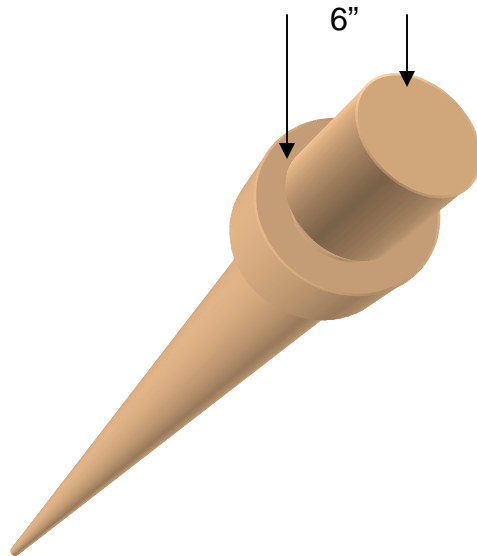
- Lightly sand the outside of our donut to get rid of any roughness.
- Now measure 6" from the unsanded end of our closet rod. Make sure that the donut or sleeve we have just made slides over that end of the rod.

The donut may require some light sanding on the inside. It should slip onto the pole with only slight resistance.

- Apply a relatively thick amount of our wood glue below and around the circumference of our 6" mark an inch or so in width (from the 6" mark towards the sanded end). Now slide the sleeve over the unsanded end of the rod down so the top is flush with our 6" mark. This should leave 6" of exposed rod towards the unsanded end. The glue should be pushed down and inside the donut as we push the donut over our 1" ring of glue. Normally one would apply wood glue to the inside of the donut as well, but I have found that most of the glue is squeezed off when sliding the donut onto the rod.



Shows glue ring



6" of our closet rod should be exposed from the top of the donut

- Let this dry; once dry you can apply a filet of wood glue where the sleeve/donut meets the rod on both sides. Let dry.
- The ID (inside diameter) of the PVC pieces is slightly larger than the diameter of the closet rod. You will need to make shims from your scrap paper or cardboard. Mix up your epoxy and have your PVC pieces at hand. Apply a generous amount of epoxy to the inside of one of your PVC pieces. Slip it over the unsanded or 6" end of your closet rod. Bring it down so it is flush with your sleeve/donut. Use your paper or cardboard scrap and make shims so the PVC piece is centered on the rod. You can use some scrap cardboard to scoop up some of the epoxy to dribble it between the PVC and rod to make sure you get a good bond.
- Take your second piece of PVC sleeve and again apply epoxy to the inside. Slip it over the unsanded end of the rod till it is flush with the top of the rod. Shim to center it and dribble epoxy into any gaps to get a good bond. Let dry.



PVC epoxied over end of rod

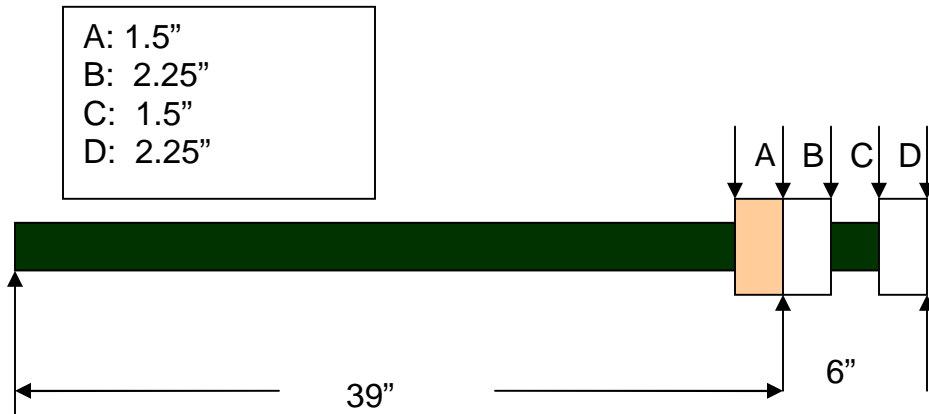


Completed PVC end

- The lance can now be sanded to get out any roughness and glue/epoxy splatters. Sand or scrape off any epoxy that has dripped onto the outside face of the PVC, otherwise the cardboard tubing will not go on. After that you can paint or stain it the wooden parts of the lance.



Completed Lance



Lance dimensions



Lance with tube in place



Lance in use