



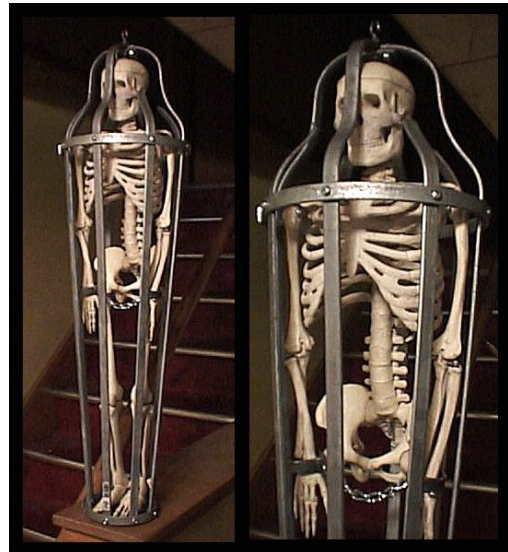
<http://www.home.earthlink.net/~halloweenobsession/halloween/Projects/cage2.html>

Skeleton Cage II Getting Medieval

Featured in [Haunted Attraction Magazine](#) #21.

In my first Hanging Skeleton Cage project, I designed the cage so that it could be built easily, quickly and cheaply out of wooden disks and dowels. I wanted this new design to be more realistic, with a look and feel of a medieval dungeon.

This cage would be built from metal bars and be very confining to the occupant, a Mr Thrifty skeleton from Anatomical Chart Company. I could not find any pictures of cage of this type, so I sketched how I thought one should look.



Once again, the key to the project was finding the appropriate construction materials. Most metal bar stock is too expensive, to be practical, for this cage. After some searching, I came across cheap metal bars used for chainlink fence installation. 46" pieces cost only \$1.17 each.

Materials List

Mr. Thrifty 32" skeleton from Anatomical (\$15.00)
10 46" chainlink fence tension bars (\$11.70)
16 #10-24 x 1/2" bolts and nuts (\$.96)
1 #10-24 x 1" eye bolt (\$.39)
2 feet of heavy duty chain (\$1.60)

Obtained from
Omarshauntedtrail.com

Tool List

Bench Vice,
Drill Press with 3/16" bit,
dremel tool w/ fiberglass cutting disk,
pop rivot tool,
hammer,
pliers.

A hand drill and hacksaw could be used to drill and cut the metal bars.

With a bench vise and some elbow grease I was able to bend bars into two rings measuring 5.5 and 8.5 inches in diameter. I drilled a hole at each end of the bars and then bolted the ends together.

I drilled 8 evenly spaced holes around each metal ring, using plenty of oil to keep the drill bit lubricated. The first four bars need a hole at the bottom and a hole 25.5 inches from the bottom. Using the skeleton as a guide, I made three bends to the first bar, one directly above the upper hole for the skeleton's shoulder, a second bend in the opposite direction for the skeleton's neck, and the third for the skeleton's head (see picture).

Once I was happy with the shape of this first bar, I used it as a guide for the others. I cut the bar so that it ended 1/2" past the centerline of the skeleton's skull. The second bar is identical to the first, while the third and fourth are 1" shorter, ending 1/2" before the centerline of the Skeleton's skull. Drill a hole at the ends of the four bars.

You should be able to assemble the two rings and four bars with nuts and bolts. You may have to make some adjustments to get everything to fit together. I cut a 2" piece of bar and drilled a hole at each end and one in the center. This piece is used to connect the third and fourth bars to the first and second.

The final four bars wrap below the cage to form the cage's bottom, and go up only to the skeleton's shoulder. Place one of the last four bars in a vice with only 2 inches above the vice. Use a hammer to pound the end back, forming a 90 degree angle.

Place the bar into the cage and mark where the bottom hole will be. Mark the hole location by drilling through the existing hole in the ring and into the bar you are marking, I then finished the hole on my drill press. Place the bar back into the cage and temporarily bolt it in place. Now mark and drill the upper hole in the same way.

This procedure will custom fit the bar to the cage. You can now make the first two bends to this bar. The third bend is not needed because these last four bars do not continue to the top of the cage. Cut off the bar 2.5 inches above the upper hole. The detail on the top ends of these bars consists of cutting the end of the

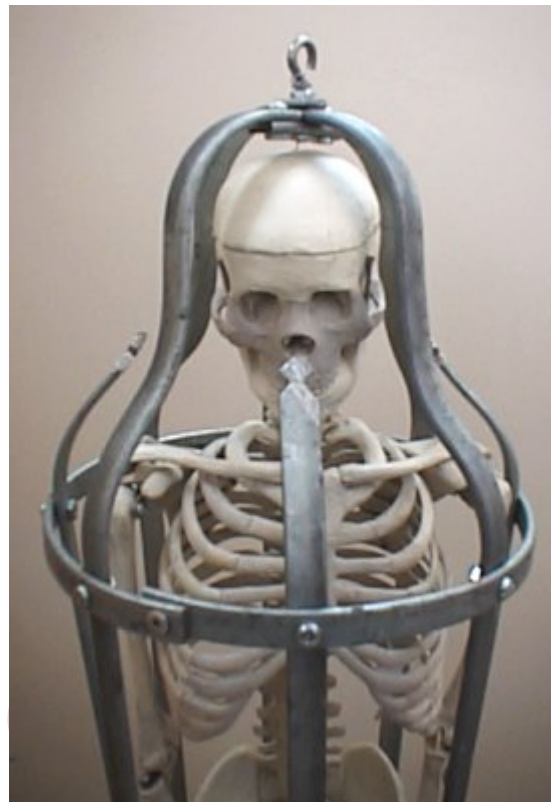
bar to a point and removing some material to create an arrowhead shape (see picture).

Use the first bar as a guide for the last three. The cage will stand on these last four bars, so make sure that they are level to each other. This, of course, will not matter when the cage is hung.

Drill a small hole into the top of the skeleton's skull directly above the nut which holds the skull onto the spine. Loosen the nut and wrap a piece of thin wire around the shaft, and tighten the nut. Thread the wire through the hole in the skull. Put the skeleton into the cage, and hold him so his feet are flat on the bottom of the cage, and thread the wire up to the top of the cage and wrap it around the eye bolt. Using a pair of pliers, open the eye bolt and insert the end of your chain, and close the eye bolt.

In this project you will be drilling, hammering, and cutting metal. It is mandatory that you use proper eye protection during these activities. If you use a dremel type tool or air powered cutoff tool to cut the bars, you will also need a mask to protect you from breathing in metal and fiberglass particles in the air. Although this cage took more effort to build than the original design, I think that the extra time and effort was worth it. It is still a cheap project, costing about \$30, including the skeleton.

This design could easily be scaled up to hold a full-size skeleton. This is the perfect project to keep you occupied, on those long cold winter nights.





Obta from
Omarshantedtrail.com

Bonus Shackle Instructions

Using 1/8" by 1/2" bar stock, press the bar against a 1" o.d. pipe in a bench vice.

Using a hammer, pound the bar until it is wrapped 1/4 way around the pipe. Reposition the bar so that it is vertical again. Repeat these two steps until the bar wrapped all the way around the pipe. Remove the bar from the vice and clamp the straight portion of the bar. Hammer the rounded bar until the straight portion is perpendicular to the rounded portion.

Cut off the straight portion of the bar and round the end off, using dremel tool with a fiberglass cutoff disk. Drill a 3/16" hole into the end of the shackle. Make the second shackle. Cut a 5" piece of chain.

Cut open the last links on both ends of the chain. Bend open the links and insert them into the holes in the shackles and bend them closed again. I had to remove the skeleton's hands to put the shackles onto his wrists.