

## How to Make Chainmail

### Chainmaille Tutorial

This is how to weave the European 4 in 1 pattern of chainmail. European 4 in 1 is the pattern most people think of when they imagine chainmail. It's what you see in movies like Lord of the Rings. It is called European 4 in 1 because it is of the European family of maille, and if it were to be expanded into every direction infinitely, each one ring would go through four others.

You will need a few things to get started.

Supply list:

Jump rings

Two pairs of pliers

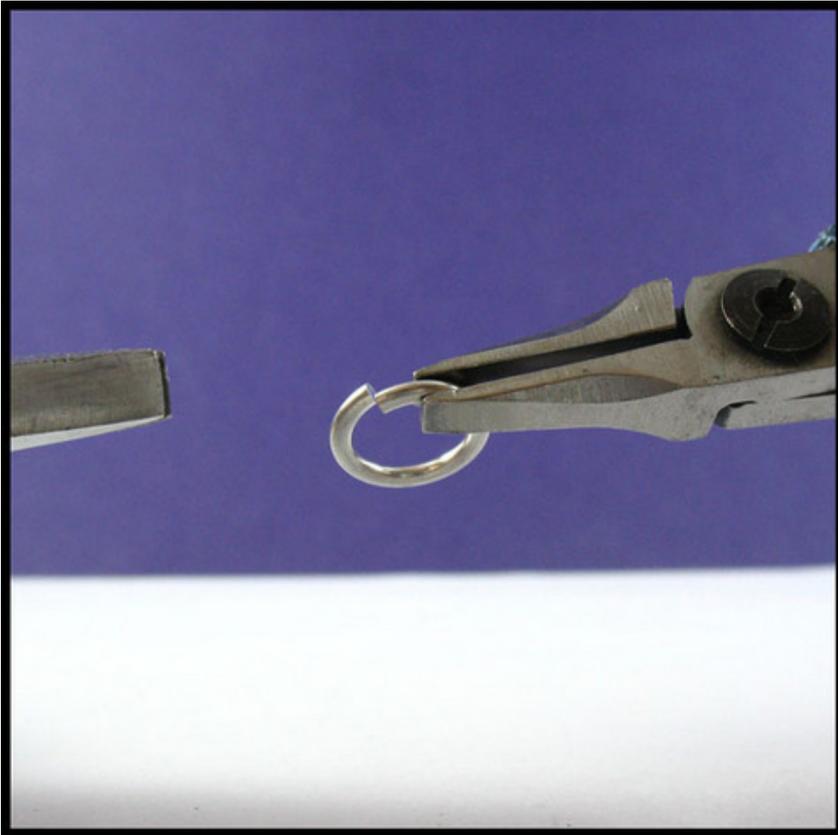
That's it! Your jump rings can vary. You can make your own by winding a coil and cutting them, or you can buy them pre-made at jewelry supply stores. The rings I'm using in this tutorial are rather large. They are made of 16 gauge wire, and they have an inner diameter of 5/16 inch. They are made of bright aluminum. This ring size overall is not optimal for European 4 in 1, as it is loose. In practice a smaller ring should be used, unless you are looking for the open, airy feel that you'll see in the completed project here.

I use one pair of wide flat nose pliers to grip the rings, and one pair of slim flat nose pliers to do my maneuvering. You can also use chain nose, bent nose, or even needle nose pliers if it's what you've got.

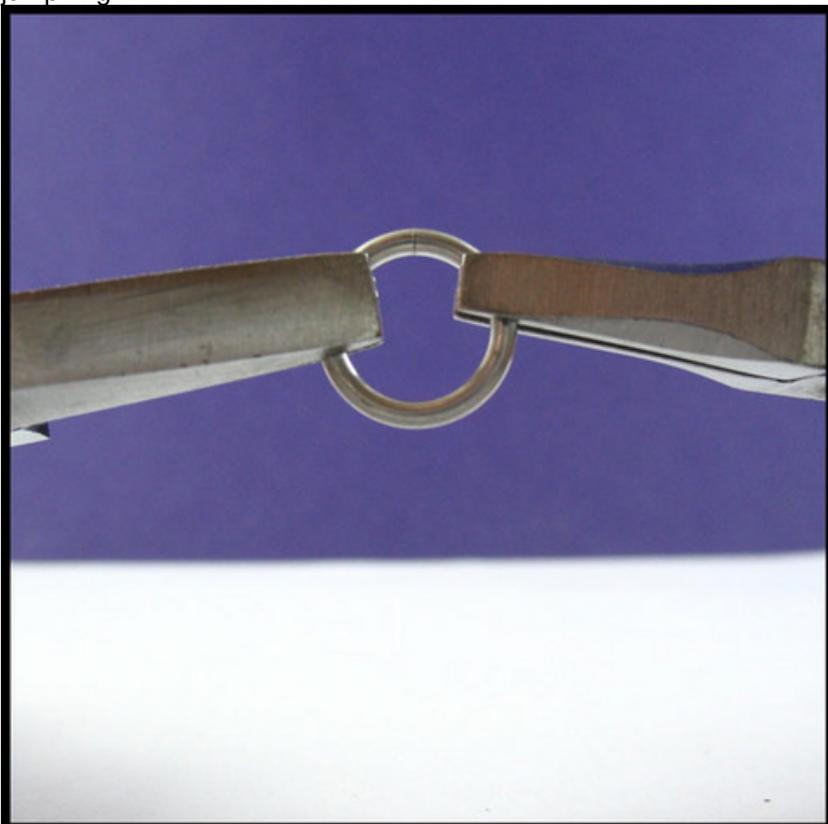
What we're learning is simply how to weave the pattern together to make a patch. Here's what the finished product will look like.



Alright. Now to get started! The most important thing to any mailer is how your closures are. Every ring you close, you want it to be perfectly smooth and seamless. The place where the ring is cut should be almost invisible when the rings are closed the right way (and of course given that your cuts and metal allow for this). This is important to ensure your piece is comfortable to wear whether you're making a bracelet, a shirt, or anything really. Here's a picture of a new, just cut, jump ring that hasn't been opened or closed yet.



To close a jump ring properly, you want to grab each side of it with a pair of pliers. I like to open mine a bit first. Do not try to pull the sides apart; it won't work out well. It will make the ring misshapen and you will have a hard time getting it round again. To open, move your right hand pliers toward your body and your left hand away from you. Then to close, slowly move the right side forward until it meets with the left side. Keep in mind that you're trying to make that seam as smooth as possible, and try to get the ends to line up flush. You may need to wiggle the ring sides around a smidge to get them to line up perfectly. Here is a good, closed jump ring.



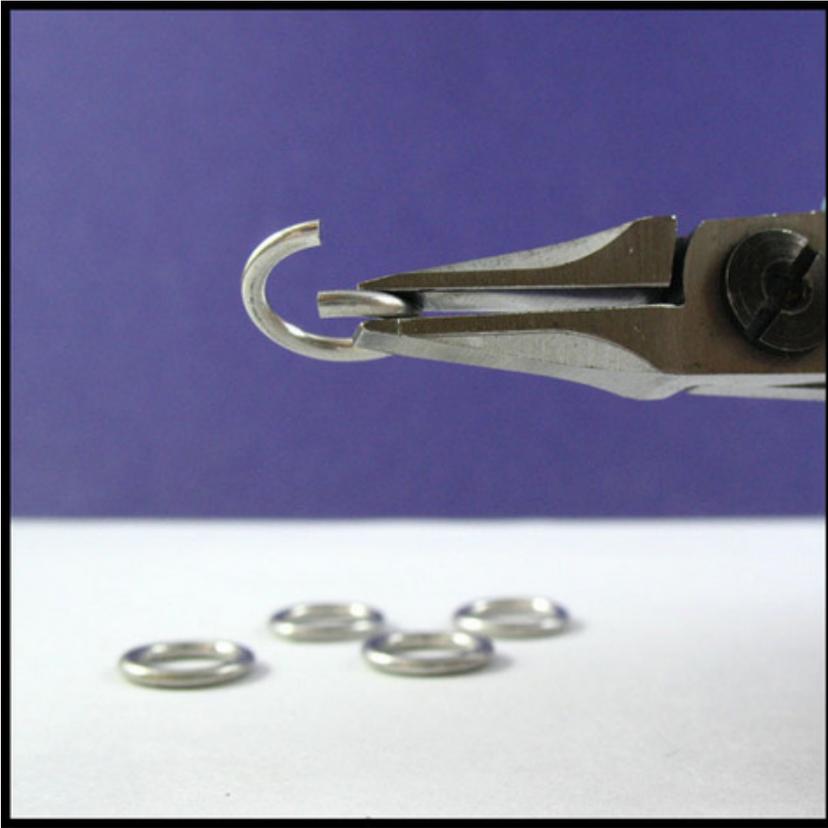
Your ring should be smooth and unwarped. This will take practice if you are new. Before you start weaving, practice closing your jump rings well. It really is the most important thing. I advise getting some cheap rings to practice with before you jump in with sterling silver or gold rings.

Now that we've got how to open and close a ring down, it's on to the actual making of the maille!

◆ Step 1: Close four jump rings using the correct technique outlined above.



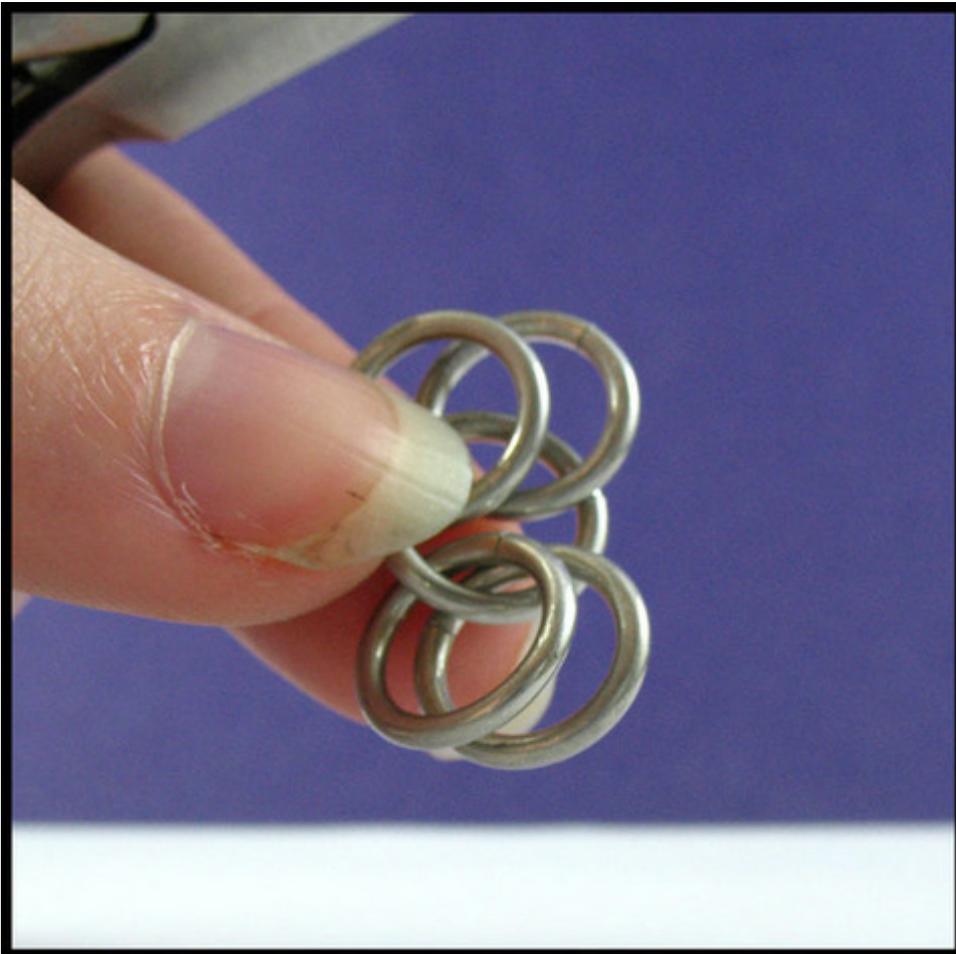
◆ Step 2: Open a new ring, and thread the four closed rings from Step 1 onto it.



◆ Step 3: Close the ring that has the four previously closed rings on it.



◆ Step 4: Arrange the rings as shown. I weave all my maille in my hands, not laying down. I've shown both views.





◆ Step 5: Close two rings and open one ring.



◆ Step 6: Weave the open ring onto the pattern from Step 4. You will see that it leans the same way as the ring that was the original open ring from Step 2. This open ring should go through two of the previously closed rings. This step is probably the most difficult for beginners. Study the picture and make sure you have it lined up correctly.



◆ Step 7: Add the two closed rings to the open ring and close the open ring.



◆ Step 8: Flip the new rings around so they are in the pattern shown, similar to Step 4.

Here are the rings just as you've added them:



And flipped around so they're in the correct position:



◆ Step 9: Close two rings and open one ring. Weave them the same way you wove the last set of two closed/ one open. This step is the same as Steps 5-7; just repeat those.

This picture shows the open ring woven with the two closed rings added on:



This picture shows the same exact thing as the last picture, just up in the air. This is how I weave all my maille; up in the air/in my hands.



◆ Step 10: Now close that open ring and flip the closed rings around, same as Step 8.



◆ Step 11: Repeat steps 9 and 10 until you have a strip as long as you'd like your finished piece to be.

From here, you could be done! You've woven a strip of European 4 in 1 chainmail! However if you'd like to make your strip wider, here's how to do it. This is how you'd keep weaving if you wanted to make your own shirt.

◆ Step 12: Close two rings and open one ring.



◆ Step 13: Weave the open ring through the two rings on the side of the strip you originally made. It will be leaning the same way as all your previously "open" rings. Add your closed rings to the open ring and close the open ring.



◆ Step 14: Close one ring and open one ring. By now you should be able to see the pattern of how each ring goes through four others. Weave the open ring in, add the closed ring, and close the open ring.



◆ Step 15: Repeat Step 14 until this addition is as long as your previous strip. Now you're all done! If you'd like it even wider, you can repeat steps 12-14 until your patch is as wide as you'd like.



The applications for this weave are limitless. You can make jewelry, clothing, or pretty much anything that can be made with fabric. Here are a few things I've made with this weave:







And that's how it's made! Of course this is just one of the literally hundreds of chainmaille weaves. Feel free to browse around my site to see lots of other patterns. :)