

# 鋼錬金術師

FULLMETAL ALCHEMIST

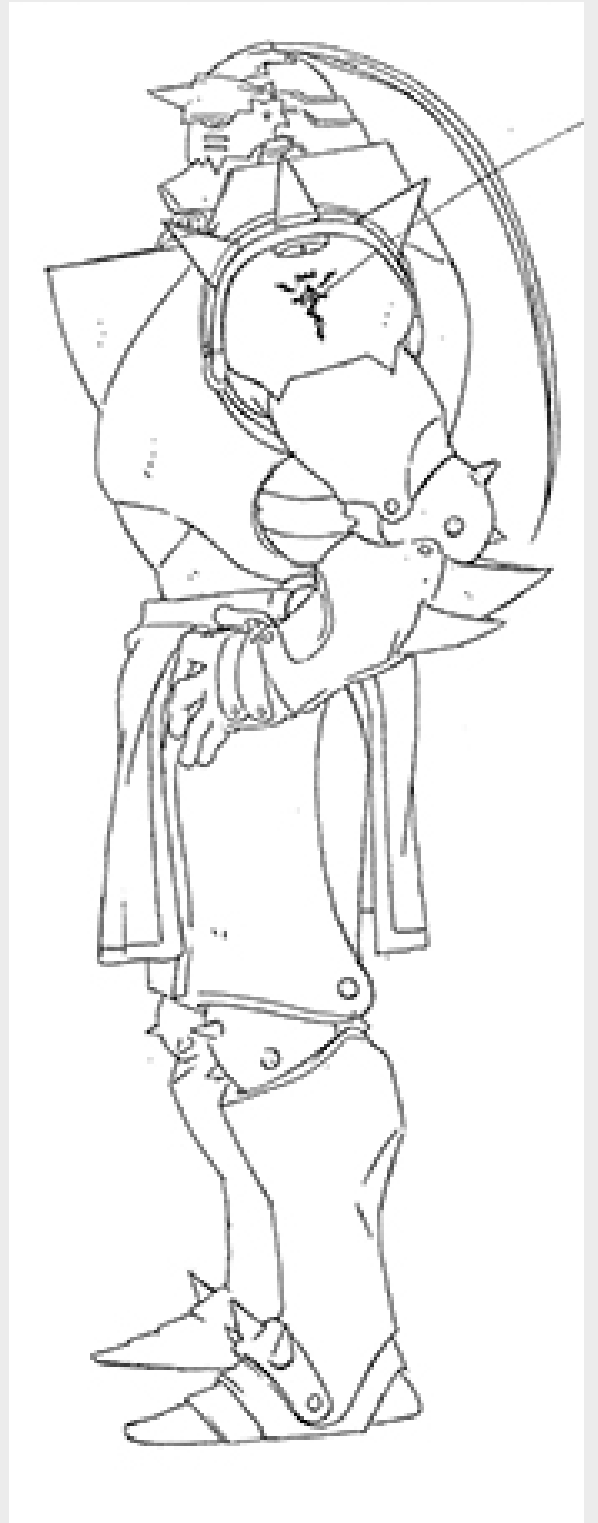
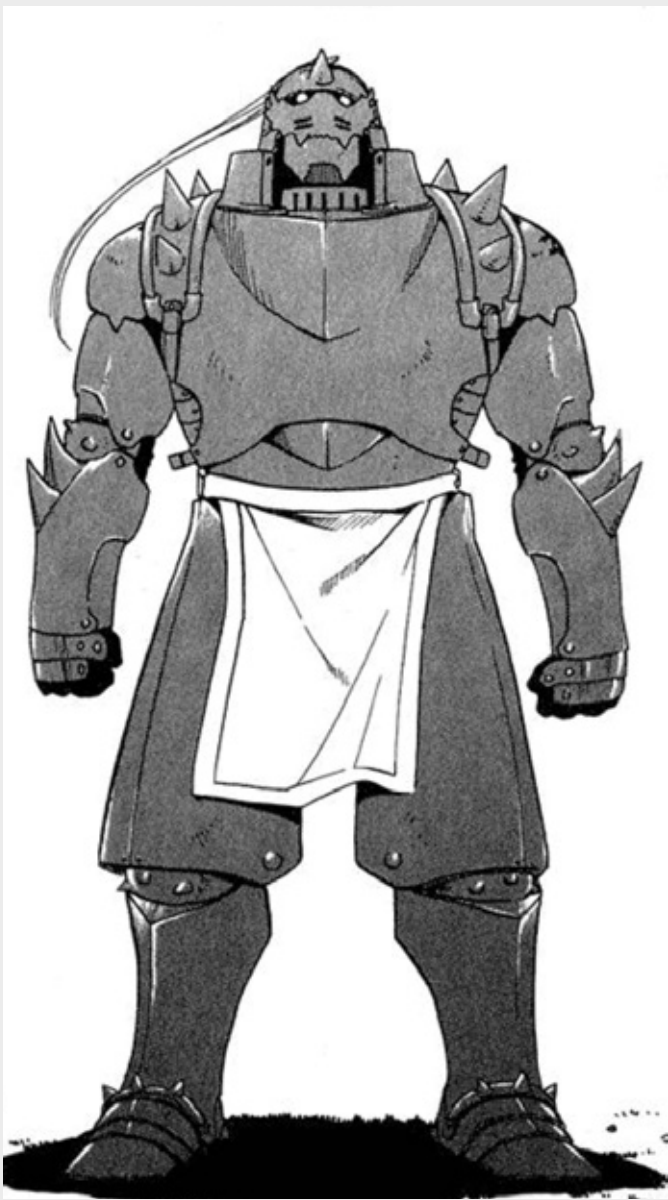
**Character:** Alphonse Elric

**Manga:** Fullmetal Alchemist

A 14 year old boy who lost his body when he and his older brother committed a taboo by trying to bring their mother back to life through Alchemy. Alphonse exists solely as a soul alchemically bound to a large suit of steel armor. He is a skilled alchemist, a kind person and loves cats.

**Cosplay:** I chose to stay faithful to the original manga depiction, drawing references only from Hiromu Arakawa's work, since she draws Alphonse more consistently than the anime adaptation.

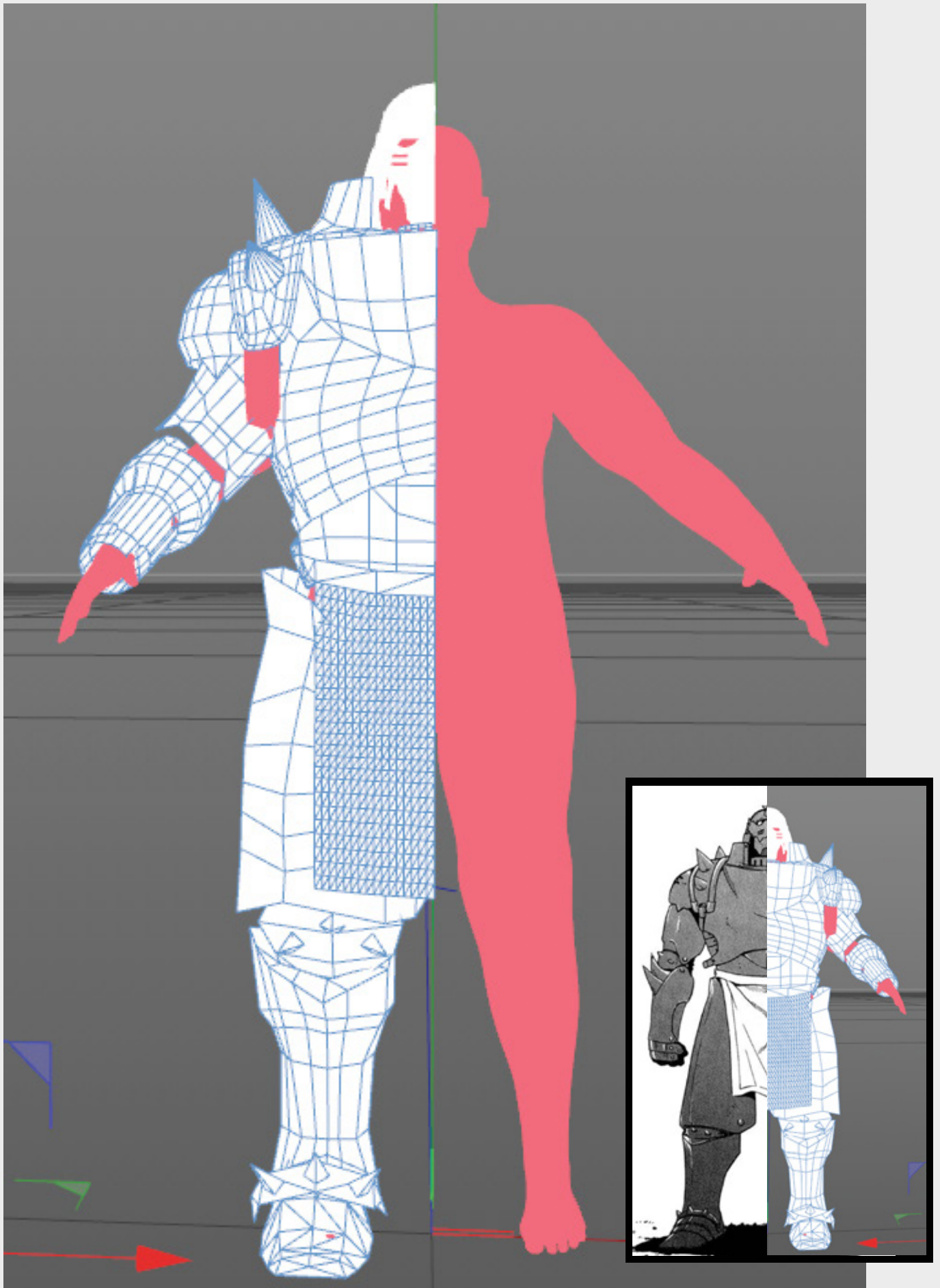




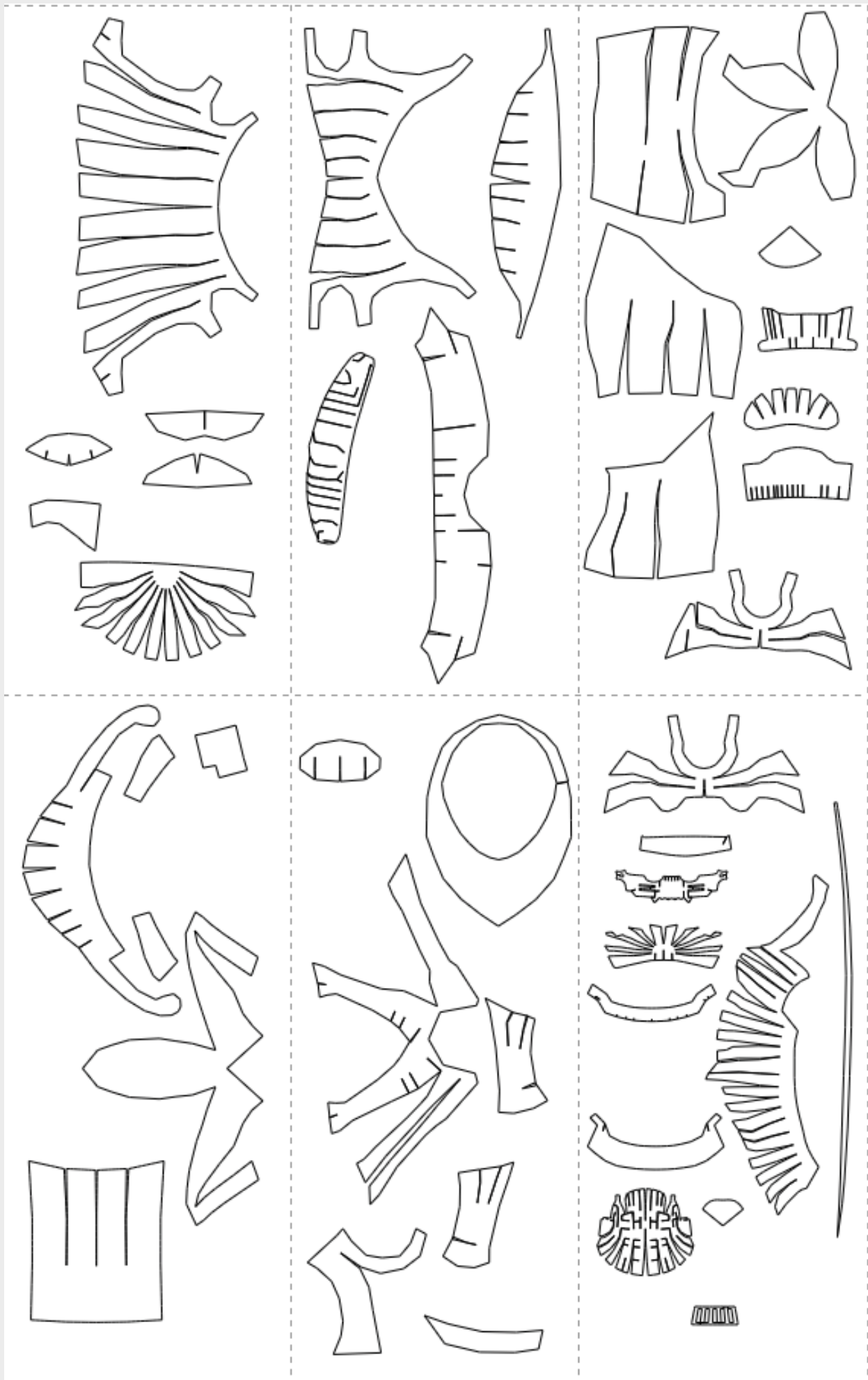




First, I modeled the armor in 3D using Cinema4D. I built it around my own body, so that I could exaggerate AI's dimensions but still stay close to my own.



Then i unwrapped it into patterns using Pepakura Designer.











The helmet, which functions as Alphonse's face. I constructed the eyes so that looking down makes the expression seem angry and when looking up it looks sad. The manga does this as well



I made sure the eyes glow very faintly by using LEDs behind a few layers of painted transparency.

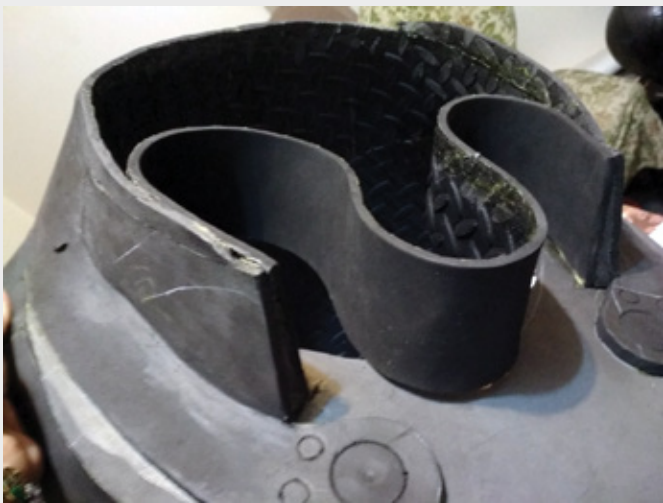
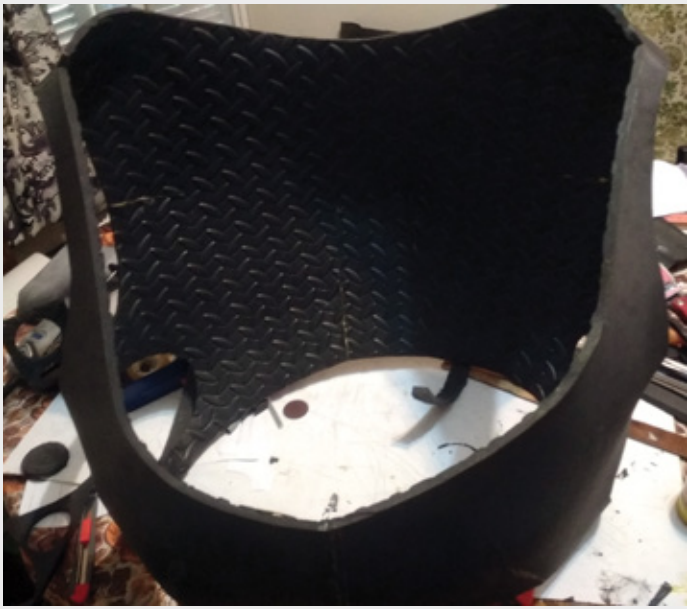




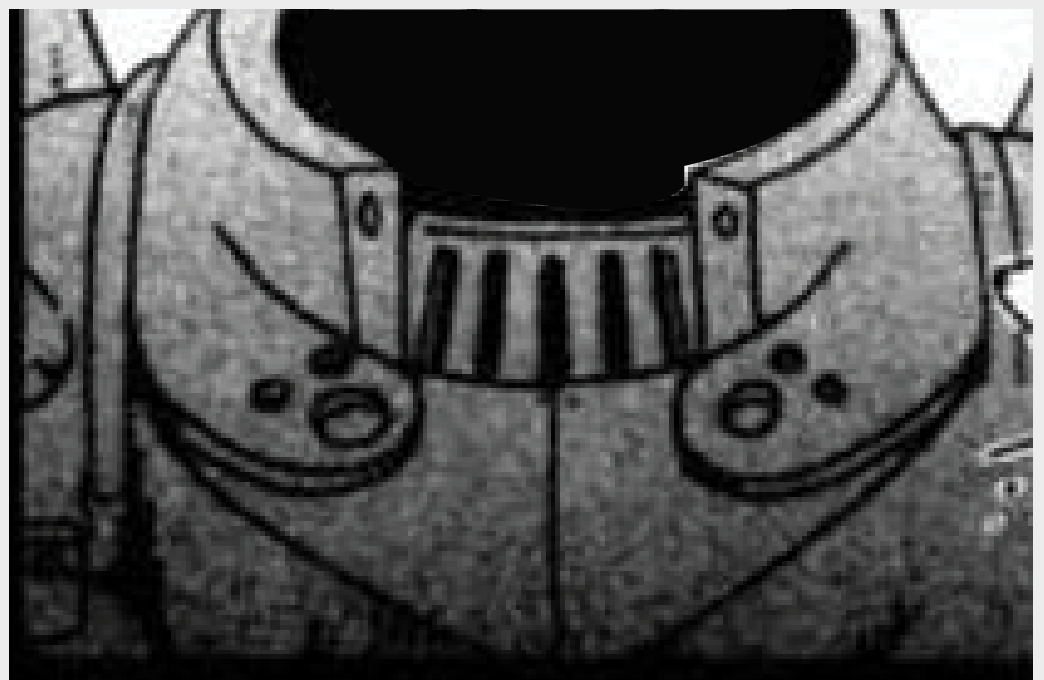


The foot armor is articulated so it can follow the shoe inside. This is how medieval armors work, and it's how the manga works too.



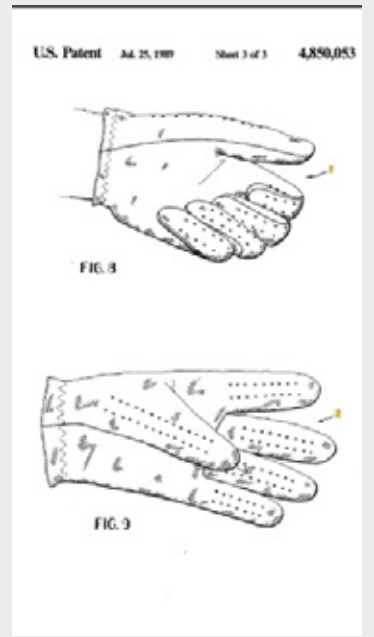


The chestplate is one of the more complex pieces of this build. I made sure to make the collar double-thickness, and include the large and small indents. The three circles at the very front are tongue-and-groove joints, which in the manga allow the detachable triangular chestpiece to align with the collar.

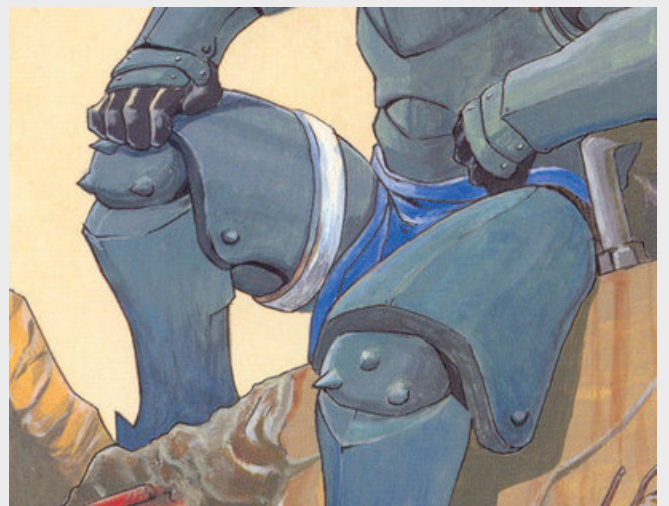
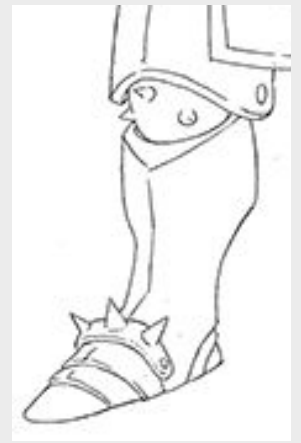
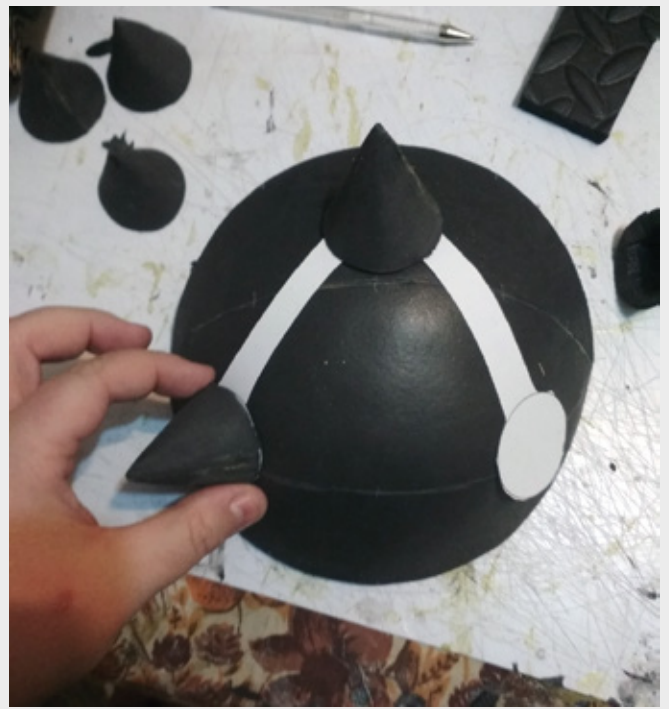




Al's gloves in the manga have a seam along the thumb and fingers which is characteristic of "Gunn" style gloves (aka work gloves). Thankfully an old US patent was available on the internet (US4850053A). I cut the pattern from black leatherette and sew it using a sewing machine and needle and thread for the harder curves at the base of the fingers.







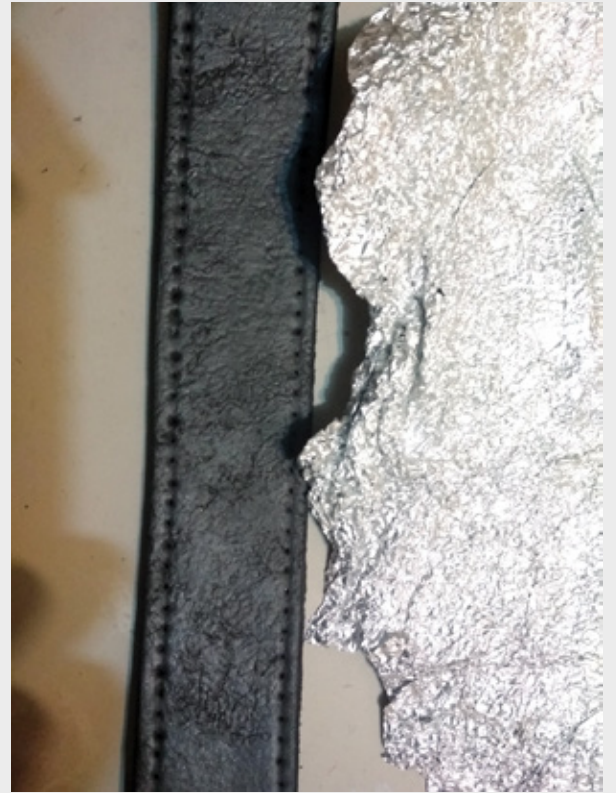
The kneecap is another piece of spiked armor. The spikes are cylinders made with eva foam. In the final photo the DIY acrylic sealer can be seen. It's common plumbers acrylic sealant with some water and black acrylic color added. It hides imperfections and seams, and gives a perfect texture for the silver rub 'n buff to adhere to.



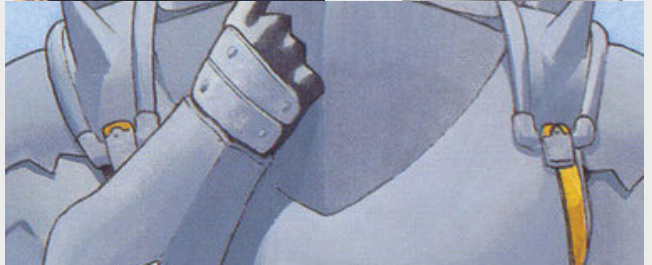
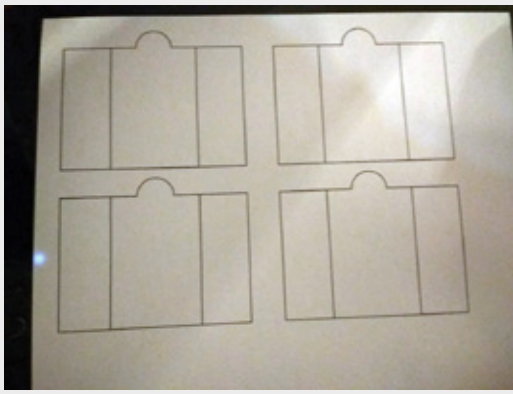
The creator of the manga, Hiromi Arakawa, is very camera-shy, and only appears as a drawing of a cow. Medieval armorsmiths "signed" their armor using a stamp, and since Arakawa designed this armor I decided to create a stamp out of the cow.



All leather was made using eva foam, which I textured using crumpled aluminum foil and painted. I used a fork to make the holes and then hand-stitched the leather strips using dyed wool and a thick leatherwork needle.



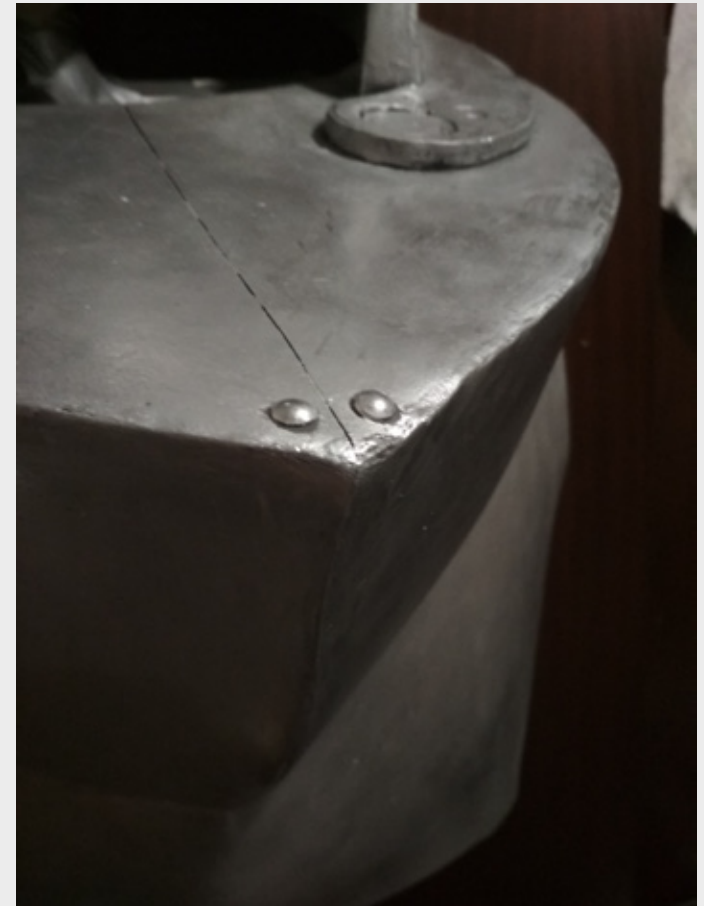




The leather strap buckles looked very distinct in the manga, so I decided to custom-make them by heat-forming sheets of styrene plastic.



This armor has a lot of rivets. I used googly eyes and plastic tacks for them. I made sure to replicate every rivet from the manga!





The pauldron or shoulder armor, with the "ouroboros" sign on it.





All the armor pieces prior to painting!

