

## 16<sup>th</sup> Century Safavid Persian-Style Coronet



*“The Head is no otherwise dress’d under the Vail or Kerchief, but from the End of a Filler, cut or hollow’d Triangularwise’ and this is the Point that covers the Head, being kept upon the top of the Fore-head by a little Fillet, or String about an Inch broad. This Head-band or Fillet, which is made of several Colors, is small and light: The little Fillet is Embroider’d, in Imitation of Needle-work, or cover’d with Jewels, according to the Quality of the People. This is, in my Opinion, the ancient Tiara or Diadem of the Queens of Persia; none but the Married Women wear them; and this is a Mark whereby they known to be under Authority.” (Chardin, 216)*

### Description

This SCA appropriate Persian Bannthehn’s coronet was based on “The Seated Princess”<sup>(1)</sup> an illumination of the Safavid Dynasty (1501-1722). I made all attempts to stay as accurately close to the illuminated piece as possible. I did, however, have to make several concessions in its construction due to sumptuary traditions, comfort & aesthetic appeal. I will note these concessions throughout this documentation.

The headdress of high ranking (Safavid) women is a tiara worn with a white head cloth with drooping points (Brend, 189). An example of this style can be seen below:



<sup>1</sup> Seated Princess: Mohammadi, Herat, c. 1565

<sup>2</sup> Young Women: Mahmud, c. 1550

<u>Period Materials</u>	<u>My Materials</u>
Brass	Brass
Brass Rivets	Brass Rivets
Acid Etching compound: Sal ammoniac, sublimate, verdigris, and a little nut gall vinegar (Binringuccio)	Acid Etching compound: Equal parts water, ferric chloride, and hydrochloric acid
Gold alloy solder (Nigel)	Tin-Solder
N/A	Head pins
N/A for this project but easily documented gem	Freshwater pearls
N/A	Brass spacer beads

## Construction

The coronet is constructed of individual brass plaques that have been acid-etched with a decorative design, including some heraldry (which is a personal touch not a period affectation), then mounted to a brass band using brass rivets. Five unique plaques were designed using the tiara shown in the Seated Princess (See Figure 1) to make up the body of the piece. I made 5 plaques because Bannthegn coronets are, according to Atenveldt Sumptuary Traditions, 6 pointed. However, the original piece was made of an odd number of plaques, so I chose to an odd number to correspond with the original piece. Each plaque has a length of copper tubing tin-soldered to the back used to house freshwater pearls by a headpin & spacer beads. These pearls would not have been seen at the tops of each point in period, but were placed there to denote rank per sumptuary tradition.

After close inspection of the Seated Princess (see Figure 1) I determined that the individual plaques must have had some form of engraving on their surface. Much of the appeal of Islamic metalwork lies in its surface decoration. Even the most complex forms were covered in minute decoration which challenges the three-dimensionality of the object. (Ward, 35)

The individual I fabricated this coronet for is a Laurel within the Society for Creative Anachronism. I wanted her coronet to denote this while not being obvious. I also wished to include subtle pieces of her personal arms as well of that of the Kingdom while still maintaining a Persian flair in the design. Therefore, the middle plaque represents the individual and the Kingdom she served and the other plaques were decorated in my artistic rendition of the Laurel. Baer states that “flowers or shrubs are often set into medallions or bands and function as ornament...” noting that vegetative surface decoration was common.

<u>Step in Process</u>	<u>Period Method</u>	<u>My Method</u>
Cut out plaques	“Brass was the favorite base metal for fine objects throughout the Islamic period...(Ward, 33).” Objects could be cast or would have been cut out of sheet metal and formed to their final shape (Ward, 33).	I traced the individual plaques onto a sheet brass and cut out each rough shape using a modern Beverly shear.
Filing to shape	I found no information on how pieces were treated after being cut out. I believe it is assumed that they would have been filed, therefore authors do not note that this was done.	Each piece was ground and filed to shape using an industrial belt sander and hand filing on each piece to obtain the exact shape & dimensions I required.

<p>Hammered curve</p>	<p>Hammering was used to shape objects. They could be raised by hammering the metal sheet against an anvil or sunk by hammering the sheet into a depression (Ward, 33).</p>	<p>In order to obtain the curvature on each plaque needed to mount it to the band I hammered the pieces using the depression method by laying them inside a large half pipe. I then laid a full pipe into the half pipe on top of the flat piece and hammered to full pipe. This curved each piece into the desired shape.</p>
<p>Acid Etching</p>  <p>Candle stand, c. 1575 This candle stand is an example of the high-quality metalwork produced by Islamic artisans in the 1500s and 1600s. This specific type, which required time-consuming cutting and etching of the metal, is associated with the reign of Shah Abbas (1558–1629) of the Safavid dynasty. The decoration of this candle stand, which was probably produced in Isfahan, required labor-intensive metal cutting and etching of the metal which was extremely labor intensive (Asian Art Museum).</p>	<p>A method of metal surface decoration used by the Safavids was that of etching as seen in the example to the left.</p> <p>“There were two different techniques of acid etching: line etching and raised etching. In raised etching the surface of the metal was covered with an acid-resistant material such as wax, varnish, oil paint or tar. This then allowed for a design to be scratched onto the surface through the material revealing the metal beneath the design. The acid would then “bite” into the unprotected areas, leaving a permanent design. The coating was then removed with turpentine and the design was blackened. Line etching, on the other hand, utilized the application of wax or varnish to the surface of the metal using a fine brush to those areas that were to be decorated with the elevated design. The background was usually decorated with small raised dots, formed by applying the protective medium with a quill. These designs were also blackened to show the design in slight relief (Fliegel, 83).”</p>	<p>Acid Etching:</p> <ul style="list-style-type: none"> <li>▪ Painted pieces using paint pen &amp; spray paint</li> <li>▪ Scratched surface for raised etching areas using stylus</li> <li>▪ Placed pieces in an acid bath for 4.5 hours</li> </ul> <p>As my form of protective coating I used common household paints. I coated the backs &amp; edges of all of my pieces to be etched with spray paint. I then utilized two different sizes of paint pen for my line etching and a metal stylus to scratch away paint for my raised etching. Upon the completion of the surface decorative painting, I placed my plaques into an acid bath of equal parts water, ferric chloride, and hydrochloric acid for approximately 4 hours to obtain the desired “bite”. I then cleaned the pieces using household dish soap in preparation for the next step of construction, soldering pieces in acid bath for etching</p> <p>I utilized both line &amp; raised etching in this piece. The laurel “tree” plaques were all decorated with line etching and the “arms” plaque was created using line etching on all but the arrow, in which parts (the feather fletching) were completed using the raised etching technique.</p>

Soldered Pearl Housing Tubes	While soldering was a period technique it was usually carried out using a gold alloy with a lower melting point than that of the base metal (Nigel, 135). Mounted pearls are not an affect of the original, but are used in this piece to denote the rank of Bannthegn.	To ensure that this coronet truly reflected the rank of Bannthegn, spheroids needed to be mounted at the points of the piece. I accomplished this by soldering small amounts of copper tubing to the back of each piece. Each tube then houses a head pin holding a pearl as well as anywhere from 2-4 brass spacer beads. I utilized tin solder as a modern equivalent that had a lower melting point than the brass I was working with.
Riveted plaques to band	Islamic metalwork objects were joined either through soldering or the use of rivets. (Ward, 34)	Riveted each plaque onto brass band In order to mount the plaques to the band of the coronet I used brass rivets. These are applied by punching holes in the plaques & corresponding spaces on the band then the rivet goes through both of the holes. The rivet is snipped off at just more length than the piece and is “peened” (peening-the mechanical working of metals by means of hammer blows) to cover the holes on the back of the piece leaving the rivet head visible on the front.

### Conclusion

My entire re-enactment career, I have been fascinated with coronets, specifically those of the Middle East. I had wanted for a very long time to re-create a Middle Eastern piece that would function as an SCA symbol of rank. I have accomplished this goal and am very satisfied with my results. I would only do two things differently in the future as I build more coronets. I want to place the copper tubing closer to top of points thereby getting rid of the need for spacer beads and making the spheroid more stable. I would also prefer to learn how to weld my circlets in the future as I believe these have a more finished, professional appearance.

## **Sources Cited**

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