

First of all, I know some of you are laughing your heads off.

"Portia?? Isn't she some Viking costumer?"

And the answer is: I used to Say No To Viking too. Before I was dragged kicking and screaming into the Dark Ages, I was apprenticed to Mistress Monique de la Maison Rouge, an Elizabethan powerhouse,, and only did 16th Century. In fact I used to think Cotehardies were early period. Really.

This love of late period has never really gone away, and while I don't make much of it now, I would urge you to give it a go. It's fun, and once you get used to the feel of tight bodices and big skirts, well, you feel like a Princess.

This little booklet is not designed as an original research production, and by no means is it all my own stuff. I have borrowed pretty extensively from sources, mostly SCA, to show you partly what is possible, and partly where to go to find the next step of information.

If I could offer one piece of advice only: **Don't make garb for an event. It leads to** *last minute sewing, lots of stress, and compromises in the quality of your construction.* 



I hope it helps. Portia April 2008

(left a little high French, right a little Flemish)



# Where do I start?

Well, the first thing is to figure out what you want. Here are a few things to consider:

- What look am I going for?
- What kind of silhouette (ie: breast support / fat-roll taming) do I need to achieve this look?
- What might the time appropriate (or in SCA jargon "period") option be? Do I care?
- Is this a...
  - corset?
  - stiffened bodice?
  - boned bodice?
  - pair of bodies?
  - breast bindings?
  - anti-gravity bra?
- Will I be comfortable?
  - How constricted can I cope with?
  - Do I overheat easily?
  - Do I need to get out of it by myself?
- Have I got the resources to do this?
  - What is my budget?
  - Do I have the time or interest to do this?
  - Who can I ask to help me with this project?
  - Have I set myself a realistic timeframe?

As a *very* general guide, the following pages start with some ideas explored by some costumers and textile historians. I have tried to pick some of the best that I know of, but this is only a place to start, and new information/reconstructions are coming up all the time, so don't forget to update your information... and let me know too!

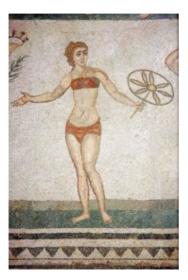
#### Historical Note:

The word corset (from the old French "corps" meaning body) first appears in 1299, but not in common use. If you are researching, try looking for "pair [payre] of bodies", "French bodies" or "vasquina". I have used "corset", as that is what this garment is now most commonly called.

# **Historical Snapshots**

#### Roman

There are no complete women's outfits that survive, so we are working off descriptions and pictures, and a few wisps of material. There are pictures of women at Bath houses, and gymnasiums, wearing what look like bikini's.



#### From:

http://content.answers.com/main/content/ wp/en-commons/thumb/3/32/180px-PiazzaArmerina-Mosaik-Bikini.jpg

#### Our expert:

"I did actually make a *strophium*, or Roman bra, but never got around to wearing it at Pennsic. Basically it's a band of 20 cm wide fine linen, which winds around the body a couple of times and is then tucked in, tied or pinned. It's very comfortable and supportive. Regarding knickers, there are two pairs of small leather briefs in the Museum of London (they look to be about 10 - 12 year old size), one of them pinked, and there are pictures of dancing girls wearing briefs and bikinis. We don't know however, if these were worn in everyday life by Roman women. However, I was only prepared to take authenticity so far – and the outfit's not a kilt!"

http://www.thorngrove.net/athenaeum/romangarb.htm

## Migration Era to Early medieval

*Generally*, there is not a lot in the way of underwear going on in this era which covers some of the big re-enactment times: Anglo-Saxon, Viking, Byzantine, Norman, and the early Medieval times to around 1350. Underwear here is an extra dress or shirt worn under the rest of your garments to wick sweat away from your body, known as a *smock* or *chemise*, but nothing to actually support your breasts.

Our Experts:

"Smock"-- The undermost layer of garb; a long-sleeved, full-length tunic which can be made either T-tunic style (although separate sleeves are basic to the Viking repertoire) or in several pieces sewn together (e.g., shoulder seams, separate sleeves, and gores for fullness), depending on the time and place.

http://www.cs.vassar.edu/~capriest/qdirtyvk.html

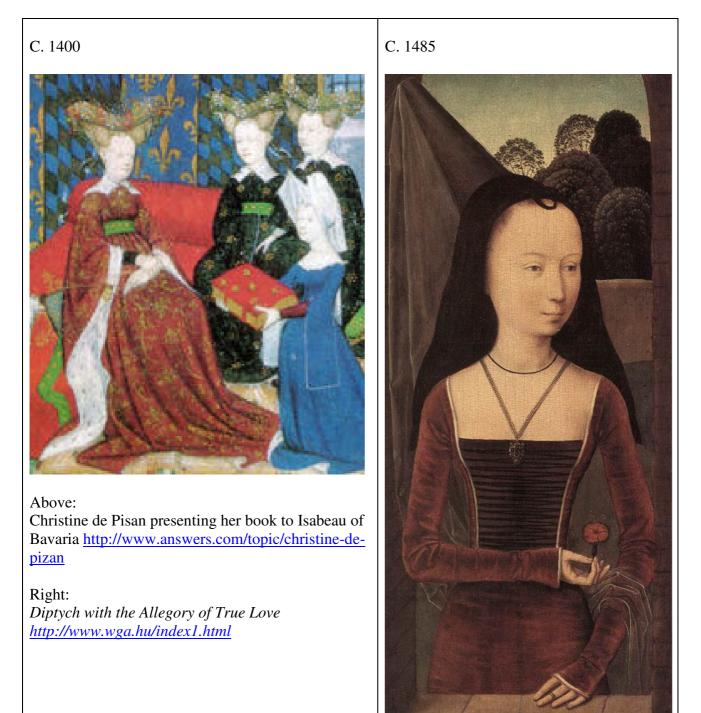
Underwear tends to be a difficult topic to research (at least for many eras and cultures) for two reasons: ordinary depictions of people in ordinary circumstances will not show it, and in many cultures the clothing layer nearest the skin was made out of (more comfortable) plant fibers, which are less likely to survive in archaeological contexts)

Mistress Tangwystal, Underwear discussion: <u>http://www.florilegium.org/</u>

There are however mentions in literature of women binding their breasts when they want to pass off as men, including the famous example of Heloise. I hate not having some support, so I wear a modern bra - not truly authentic, but definitely the line in the sand for my re-enactment.

## Later Medieval

Clothing in this era becomes more fitted. This means that you are relying on the garment to hold you up. If you look at pictures from the 1350's to the 1500's you will notice that people have busts, and they are pretty well supported.



This is actually easier than it sounds – try <u>http://sca-garb.freeservers.com/articles/corikirtle.html</u> to get some basic instructions of how to do this – note: you will need help!

## Renaissance

This is where we truly start getting into what you and I know as corsets. But even now, the corseted look has a lot of variations, from a quite soft, curvy look often found in Italian, Flemish and German looks, through to the 'waste paper bin' look of the Tudor, Elizabethan, French and Spanish late Renaissance styling.



You do need support for this style of garment, but the way this can be executed varies quite widely. The rest of this booklet will look at how to achieve some of these looks.

# Types of Corset

When you have decided on your silhouette, you can then move on to choosing which type of corset you would like. For the SCA era, there are broadly three basic types: the stiffened bodice, soft-boned corset, and hard-boned corset.

By the end of the High Medieval period, the dresses are quite tight. Any garment holding up your bust needs some rigidity which is usually achieved by one or more of the following: a tight weave relatively heavy fabric, a lining or an inter-lining. While you can build all this into one garment, there are advantages in building separate layers:

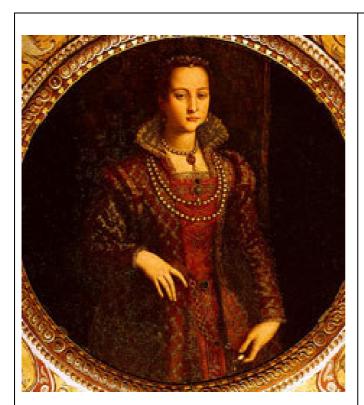
- It is easier to achieve a really smooth line
- It is easier to clean and look after separate items
- You don't need to replace the corset layer as often as fashion might change.
- It is easier to do really amazing embroidery work on lighter or piece items..

## **Stiffened Bodice**

From a series of multiple lined layers it is easy to see how the corset was born. In fact in some less structured styles, the corset layer effectively remains a underdress.

This style does require good fitting to be comfortable, and to avoid creases, particularly under the bust, and across the back.

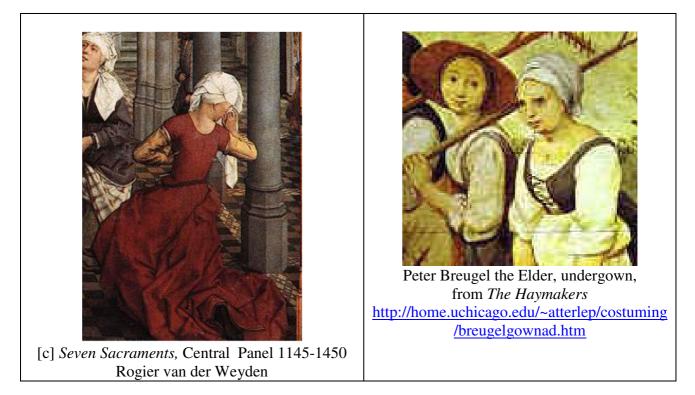
An example of an Italian use of this type of undergarment is Eleanor of Toledo's funeral clothes [a &b]. A stiffened bodice of this type could also be used for bodice section of the underdress layer of the Flemish styles (from as early as the 1470's [c] through to the mid-16<sup>th</sup> century [d]).



[a] Eleanor of Toledo http://userwww.sfsu.edu/~sahrye/diaries/looseGow nDiary.html



[b] Burial Gown of Eleanor of Toledo, Patterns of Fashion 1560-1620 p.41



# Soft Boned

One type of corset that has become increasingly popular in the SCA, particularly for Italian clothing styles, is a soft boned style. This gives you good support, but allows you to get the really exaggerated curves of the early Italian renaissance [i], and also some of the 1560-70's German styles [ii]. This can be achieve with either boning by rope, or by a bendy plastic product like rigilene.

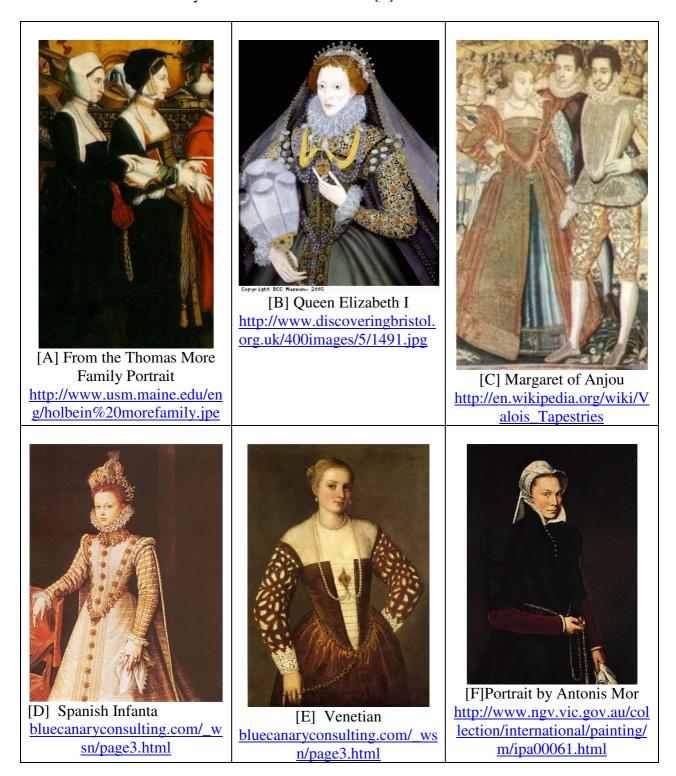
This style does have some drawbacks. While we know some farthingales were constructed with rope stiffener, we don't really have any evidence for this construction technique. Rigilene is almost impossible to encase so that it doesn't eventually start to poke through and become irritating On the other hand, it gives great support, and a curve.



# Hard Boned

Starting from the 1520's in Spain, a stiffer look comes into fashion that soon spreads to France and England, and from there to other parts of Europe. This was the great combination of corset and farthingale that raises the bust, and gives a really defined waist. Stiff boning is usually done with metal stays, but you can also be done with reeds, and even thick zip ties.

This is the style of corset required for the court fashions of the Tudors [A] and Elizabethans [B], the elegance of Medici France [C], the spectacular Spanish look [D], Venetian [E] and the Flemish/Dutch/German styles of the late Renaissance [F].



# Materials

The basic things you need for an effective corset are: outer layers that work well, inner stiffening layers with our without boning, edging (usually bias tape), and lacing holes and cord. In order to help you decide which options you would like, I have included information from three really valuable websites.

Remember, a good corset needs to be comfortable. My preference, wherever possible, is to go with natural fibres because they breathe well. As another comfort factor, if you are making a long bodied corset I would highly recommend *tassets* (the additional flaps at the bottom of Elizabethan corsets) to stop any skirts from cutting into your waist.

My favourite corset was constructed as follows:

- Janet Arnold Pattern modified with boning pattern from Jean Hunnisett (details in next section)
- Silk satin outer and inner layer breathes well, and is easier to slide the other layers by.
- Interlining of hemp canvas attached to the outer layer of the corset. The silk does need a little stiffening, but not two layers that just makes it hot.
- Steel boning, thin.
- Hand worked eyelets over soldered silver rings.
- Self made silk satin bias tape
- Hand made narrow-ware (german finger-loop braid)

I machine sewed where possible, and I also offset the eyelets to use spiral lacing techniques.

## **Our Expert: Boning Materials**

This excellent article evaluating boning materials is from: <u>http://www.modehistorique.com/elizabethan/boningtypes.html</u> It is reproduced in its entirety here. I would highly recommend this website, for both its research

and Dress Diary approach.

Periodically, the question of boning material for corsets comes up on various different newsgroups that I monitor. Mostly, these questions come from people who are new to the joys of period corsetry and who are looking for cheap, effective and reasonable alternatives to suit whatever their needs are. Because this question comes up so frequently, I thought it might make a little bit of sense if someone (i.e., me) put together a synopsis of different types of boning that are typically used in period corsetry. I also thought it might be useful if I included info on where to find the materials, cost, practicality and what tools are required to work with that particular boning.

# Modern Boning Materials



#### CABLE TIES:

Description: Cable ties are my perennial favorite. They are rigid, flexible and basically idiot proof. I buy the 24" or 34" lengths in packs of 10 and cut them to size. Two packs can fully bone a corset, similar to the one pictured at left. Don't let the fact that they're plastic fool you; these suckers are amazingly rigid. Availability: Very readily available. I buy mine in the electrical aisle at Home Depot. Any largish hardware store should carry them in a variety of sizes. The

white plastic ties are the same as the black/gray/red plastic ties, but make sure that you don't get the smaller lengths or the skinny ones.

Cost: Roughly US\$6 per package of 10. Very affordable.

Tools: A pair of scissors is all it takes. Sometimes it's useful to blunt the edges by using a candle and carefully melting the jagged ends that might poke through fabric. This is very stinky and not at all good to be doing indoors. Take it from me.

Similar To: As far as I can tell, the cable ties are the nearest thing to whalebone that I've found. Whalebone is still a very different creature, but the cable ties approximate the flexibility of whalebone very nicely.

Brownie Points: They're washable and you can put them in the dryer on low. They're also rustproof, mold-proof and generally indestructible. They're widely available, inexpensive and you can cut them to size with nothing more than a pair of scissors. It doesn't get much better than that. Draw Backs: None that I can think of, off hand.

HEMP/JUTE TWINE:



Description: The hemp boning craze of 2002 was spearheaded by my genius friend <u>Jen Thompson</u>, who wisely decided to capitalize on a little known boning material. Research is sketchy about whether or not this was actually used in corsets and bodices in the 16th century, but there is solid evidence of hemp rope being used to stiffen petticoats from the mid-16th century(<u>1</u>). By the 18th century, hemp twine was definitely being used in corsets, so Jen figured that it was pretty reasonable to go with it for a 16th century corset. The best hemp twine to use is the 1/8" diameter. Jute twine is less rigid, but when quadrupled up into a boning channel works admirably as well as hemp.

Availability: Variable. Most craft stores carry hemp in their bead aisle, geared towards the people who make those hippie hemp macramé

necklaces. You'll most commonly find the 1/16" diameter stuff, which is far too tiny for use in corsets. I've had a hard time finding the 1/8" stuff in my local craft stores, but recently I discovered that my local health food co-op occasionally caries it, and a local bead store consistently stocks it. It comes in a BIG spool, so typically you can't miss it. Jute is somewhat easier to find and less expensive.

Cost: About US\$8 per spool, from what I've seen. A spool typically comes with about 100 feet on it, which actually can go surprisingly fast, particularly if you're doubling the strands per boning channel. Spools of Jute usually cost around US\$5 or so and come with less yardage.

Tools: A pair of scissors to cut the twine and some sort of needle to thread the twine into the boning channel. Jen has some ingenious suggestions on how to make this tool on <u>her hemp corsetry site</u>. Similar To: Hemp stands alone in it's own category. Since it's not verifiably period, but has been used in other garments during the 16th century, it might actually belong in the Period Boning category. Until we find historical evidence of this, however, it remains a really good working hypothesis.

Brownie Points: Gives a nice smooth line without producing a rigid conical shape. This is particularly useful for people who sew Italian 16th century clothes, or any other region that doesn't require such a stiff posture as most 16th century English clothes do. It's also very comfortable and surprisingly sturdy. It's washable, but I'd line dry it just to be sure.

Draw Backs: There's been some conflicting reports as to how well hemp stands up in high humidity, coupled with being drenched in sweat. Some people report no problems, others have said that it can lose it's rigidity once it gets moist. I haven't ever subjected my hemp corset to high humidity or intense heat, so I can't comment.

METAL BONING:

Portia's Primers: Corsets



Description: This is what everyone is coached into thinking is the absolutely best boning material ever, not to mention "period". I have to disagree on both counts. Metal boning comes in a variety lengths and widths and is typically referred to as "spring steel". While suitably rigid, it's not exactly flexible in the way that most people find comfortable. It's also not exactly "period" (well, for the 16th century, anyway).

Availability: Hard to find in person unless you live in Berkeley, CA or Ontario, Canada. Otherwise, you can order it online from Lacis or Farthingales and a handful of smaller internet costume supply stores.

Cost: Varies from store to store according to length and width. Typically, most places will give you a discount if you order a certain number of bones or more.

Tools: Really good tin snips, metal file and plastic tool dip are all good to have handy when working with spring steel. This stuff is

a pain to cut, though, and you have to go through some trouble to file off the sharp edges and then dip the cut end into plastic/poly dip and wait for the coating to dry. It's kind of more of a pain than it's worth, as far as I'm concerned, but then, I'm not big on suffering for my art.

Similar To: Nothing really. It's the most rigid of all boning material and kinda speaks for itself. I have no knowledge of metal boning being used in 16th century corsets or clothing, but I could be wrong.

Brownie Points: It's metal, so it's pretty durable as far as corset boning goes. If you fully bone your corset, it can even be used for light weapons armor (I'm not kidding here. I've known ladies who have used it in combat archery legal corsets). It's washable, up to a point.

Draw Backs: It can rust. Yes, it can. I don't care if they say that the coating is to prevent rust, it still will. It's also a pain in the arse to work with, as I've stated before. If you don't buy the right lengths ahead of time (and this typically requires that you have your corset completely made and the boning channels sewn in before hand) you will be forced to cut them to the proper length and I've yet to find a pair of tin snips that won't kill my hands.

# **Period Boning Materials**



### BUCKRAM, CARDBOARD & PASTEBOARD:

Description: Buckram, cardboard and pasteboard are frequently referenced in Queen Elizabeth's wardrobe accounts throughout her reign as being used to stiffen bodices, pairs of bodies, and the ilk. (2)I am not entirely sure what "pasteboard" is, but my guess is that it's some form of glue-stiffened fabric. That's pretty close to what buckram is, actually. Cardboard, I'm not so sure about, but I'm guessing it's not at all like modern cardboard. Buckram is the only one of these three materials that I've attempted to use in a corset (that's it to the left). It's typically used for millinery. All three materials are also commonly used to stiffen stomachers, as well. (3) Availability: Cardboard is everywhere. Pasteboard, who knows?

Buckram is hit or miss at the local fabric store, but you can order it online in different stiffness. Cost: Cardboard is usually free. Buckram isn't. Buckram will cost you anywhere from a few dollars a yard to several dollars a yard, depending on where you find it. Tools: Scissors.

Modern Equivalents: Plastic canvas works nicely if you can't find buckram. Brownie Points: Lightweight, but not much else. Draw Backs: Flimsy and buckles under any kind of strain (notice the large diagonal crease on the left side of the corset in the picture). I had to quilt the heck out of that corset and eventually cheated by adding metal boning to the major stress points to keep it from crumpling. I've never had any success with using buckram in a corset and I'm boggled at how it could have been used in period. Perhaps 16th century buckram was a lot different than modern buckram, or tailors were being clever and didn't line the entire garment with it. Otherwise, I have no idea how it would work if you're even the least bit lumpy.

#### REEDS:



Description: At least one remnant of an extant corset dated to the 16th century was definitely boned with small bundles of reeds packed tightly into boning channels. The other two 16th century corsets that have made it to the modern era might possibly have been boned with reeds, but they have disintegrated.(4) Availability: Fairly available. I've heard of people cutting and drying their own reeds to make bents for a corset. Others have ordered reeds from basketry supply stores. My corset to the left was boned with bundles of decorative reeds that I found on sale at Michael's in the floral department.

Cost: Varies depending on whether you make them yourself (free), buy them online from a basketry store (a little pricey) or if you luck out and find

something that will work at a craft store, like I did. I bought my reeds for about US\$3 per package. Tools: Scissors and a lot of patience.

Modern Equivalents: None, really. Reeds are reeds.

Brownie Points: Reeds make a surprisingly sturdy boning material, plus they're lightweight and will allow air to move through the corset while it's being worn because they tend to spread out in the channels. They will also conform more comfortably to the body than other types of boning, much like hemp twine. Surprisingly, they don't tend to break while being worn.

Draw Backs: Reeds can be fussy to work with. Threading the tiny bundles into the boning channels can be exasperating. I've not tried to wash my corset, but I'd be a little worried about mold and mildew forming on the reeds if subjected to a wash. Also, there is potential for breakage, typically if you do something silly like step on the corset or cram it unceremoniously into the back of a drawer (both things that have been known to happen around my house).



#### WHALE BONE & HORN:

Description: The most common form of boning used in corsets of any era has almost always been whalebone (contrary to popular belief, it's actually baleen, not really from a particular bone in the whale). Horn, apparently, was also used in the late 16th century, but I'm not entirely sure how or from what animal it came from. (5) Whalebone is semi-rigid, yet flexible and it will conform to the contours of your body and hold that shape after a long period of time, much the same way that cheap feather boning does. However, the difference is that whalebone is a whole lot more substantial than feather boning, obviously.

Availability: Unavailable. If you get your hands on enough baleen to make a corset, you might end up getting arrested. Best to just let sleeping whales lie.

Cost: Unknown. Occasionally, whalebone salvaged from 19th century corsets will turn up on eBay (that's where the photo to the left comes from), but the cost is really what it's worth to the person buying it in that case.

Modern Equivalents: I think the best modern equivalents would be the cable ties. It's certainly not at all like metal boning.

Brownie Points: I have no idea, as I've never actually gotten to use the stuff in a corset that I've worn.

Draw Backs: Whales are endangered species. Nuff said.

## WHAT OTHERS HAVE TO SAY:

Ben Pung wrote me with the following advice:

"1) I've used the 1/16" hemp cord (quadrupled in a 1/4" channel) and it seems to work fine. It also has gone through the washer and dryer with no ill effect.

2) An easy to obtain reed substitute is broom straw. Brooms are relatively cheap and available at Wal-Marts everywhere and can be hacked apart with any sharp implement.

3) As for threading reeds (or their equivalents) through channels, the one time I did it I made a big pocket, filled it with "reeds", and then sewed the channels. Whether this is the "correct" method or not I don't know, but it was pretty easy.

4) I would also mention wooden busks, which make everything else work better, at least for later, conical silhouette corsets."

April Miller has this to say about spiral boning:

"I just wanted to mention that flat metal boning and \*spiral\* boning behave very differently. I use spiral boning a lot because it has all the rigidity of flats in compression along it's length yet is extremely flexible both from to back and side to side in it's width. This flexibility allows it to take curves like a dream. I have an abrupt difference of about 30" between

my waist and hips. Spiral boning will fit smoothly without poking me and also returns to it's original shape when the corset is removed.

Unfortunately it is much more expensive that flat metal boning, and retains all it's propensity for rust. I have found it in various lengths and widths and it is also available in a roll which you can cut yourself (with tin snips) and attach metal tips for protection."

Marion McNealy offered her thoughts on jute twine:

"For places to find Hemp and Jute twine, I have found it in the mail and package supply section of the drugstore and in the hardware store in the rope and string section, probably garden supply stores would also sell it as it is commonly used for marking out rows for planting. The usual price I pay for it there has been no more than \$3 a roll, and one roll was enough to complete a corset with the cords doubled in the channel. I am not really sure if there is a difference in the stiffness of the 1/8 inch hemp and jute, in the samples I have, they seem to be the same. I haven't washed mine yet, so I can't comment on that part."

<u>Christina Claridge</u> suggests another ingenious boning substitute called Strimmer Line:

"I have to recommend strimmer line. I made up an effigy corset using doubled strimmer twine between mattress ticking, and it worked wonderfully. I used the heaviest gauge available, and it was about 5dollars US for thirty yards, and used about 1-1 1/2 spools to fully bone it. Apart from the day-glo green colour, it cuts with scissors, and if you are worried about sharp ends you can melt the ends into blobs.

There's a picture of the corset on my website: www.geocities.com/christclaridge/Corset.jpg"

1. Queen Elizabeth's Wardrobe Unlock'd, pg. 195

2. Queen Elizabeth's Wardrobe Unlock'd, p6. 146

3. Queen Elizabeth's Wardrobe Unlock'd, p6. 148

4. Queen Elizabeth's Wardrobe Unlock'd, p6. 147

5. Queen Elizabeth's Wardrobe Unlock'd, p6. 147

References

Arnold, Janet. Queen Elizabeth's Wardrobe Unlock'd. Leeds, United Kingdom: W.S. Maney & Sons, Ltd., 1988

Waugh, Nora. Corsets & Crinolines. New York: Theatre Arts/Methuen, 1987

# Our expert: Busks

If you are making a hard boned corset, you will need one of these. As with much else for these style of corsets, Drea Leed provides probably the best overview, and instructions on how to make one yourself: <u>http://www.elizabethancostume.net/</u>

# BUSKS

The busk is a long, flat piece of wood, ivory or whalebone which was inserted down the front of the corset to give the bust and torso that truly flat look which men find so appealing. Depending on the length of your torso and how far down y ou want the corset's point to be, the busk can be anywhere from 10 to 14 inches long. The average busk length was 12 inches long and 3/8 of an inch thick. It tapered from a width of two inches at the top down to @ 1 inch at the rounded bottom.

Busks are not absolutely necessary to a corset, especially if you have a lot of stiff boning in it and are small busted, but they do help greatly in achieving the period sillouhete.

# HOW TO MAKE A WOODEN BUSK

To make a busk, you will need:

A saw (preferably an electric band saw, though a hand saw will do)

a ruler and pencil

a vibrating electric sander, or sandpaper with which to sand by hand

a hand or electric planer, to plane the busk down to the desired thickness

1)Wood Busks were, back when, made primarily from the hardwoods oak, ash, and walnut. If you're going for the period thing, these three woods are the way to go. Of the three, I've found oak to be the strongest and least likely to b reak.

If you don't have these woods available, any hardwood will do. You can even use high-quality plywood, which is remarkably flexible. Just avoid soft woods like pine, spruce or fir, which aren't strong enough.

2)Make the pattern.

Measure the length of the busk you want. If you're making it for a corset you already have, take the measurement from the front center top to the bottom tip, subtract half an inch, and use that. If you're not sure, use 12 inches as your length.

On a piece of posterboard, cardboard, or paper, draw a line the length of your busk, and lable the ends A and B. At The A end, measure out one inch on either side of the busk and mark.Label them C and D. Measure in half an inch from the B end of the line, and mark it; label that point E. With your ruler on point E, measure out from the line 1/2 an inch on either side; mark those poins F & G. Connect points C and D: this is the top of your busk. Connect points F, B and G with a curving line; this is the rounded bottom point of the busk. Connect points C and F, and D and G, which are the sides of your busk. Voila.

Cut out your pattern.

3)Plane the piece of wood using a hand or electric planer, down to 3/8 of an inch thick.

4)Trace the pattern onto the wood, with the wood grain going lengthwise.

5)Cut along the pattern with a band saw or hand saw, slightly to the outside of the pencil mark. 6)Sand the sharp edges and top corners of the busk using sandpaper or a vibrating sander, until they are smooth. Sand the rounded bottom until it's smooth and even. Sand the outer side (this side which will face the front of the corset) of the b usk until the corners are mostly gone and that side has a rounded shape when looked at end on. Finally, sand the whole thing with 400 grit sandpaper to make it nice and smooth.

7)Drill the holes. Using a small 1/4 inch drill, drill two holes side by side half an inch from the top. These holes will have laces running through them and the corset, to keep the busk from moving around.

8)Oil the busk, using linseed oil (which is period) or some other finishing oil. This will seal the wood, strengthen it, and make it look nice. It will waterproof it somewhat as well.

# MODERN SUBSTITUTES FOR WOODEN AND IVORY BUSKS

For those of us who don't have woodworking tools and don't have the fortune required to buy an honest-to-god ivory busk, here are some alternatives. If you put your mind to it, you're sure to find something that will do the trick. I even used a wood en spoon once--a temporary measure, but it did the job.

You can use two pieces of spring steel boning in place of the busk, sewn next to eachother. They don't provide the stiffness of wood, but they are reasonable firm and solid.

Find a wooden ruler and file the corners off the bottom end. Even a metal ruler will do, if you cover the sharp corners with tape. This is a quick fix solution--wooden rulers aren't that strong--but it will work.

Order one from the many Mailorder places that sell them.

I have used steel rulers, wooden rulers and made busks. Hands down, use a real one for comfort, though remember to make it removable if you want to wash it. Then you can also do the very cutesy period risqué thing of giving your busk lacing out as a favour to your love.

## Our Expert: Hand made eyelets

This sounds like soap-eater territory, right? No, it really is a worthwhile investment. Ever had that garment where the eyelets pop out? Ended up bashing your fingers smooshing eyelets? Ever would up oversewing your eyelets/grommets anyway? With all this hassle, sew your own. If, like me you want some extra stiffening, buy cast or soldered rings (best and cheapest are from fishing tackle stores) and sew them into your hand made eyelets. These great instructions from : http://www.curiousfrau.com/Tutorials/eyelets.htm#top#top

## How to make beautiful hand bound eyelets.

by Marion McNealy

Tools

- Sharp needle
- Embroidery floss
- Awl

I highly recommend trying these techniques out on a scrap piece of fabric before you work on your actual garment, that way you can get the size right before poking into the project you have spent so many hours on.

Once you have the right size of hole for your lace, I recommend starting at the bottom of your eyelet holes. Why the bottom and not at the top? If you make mistakes or they just don't quite come out right, no one will usually notice if they are at the bottom, but the top is usually in a more noticeable spot. Also, when I start a new project, it usually takes me about 3 eyelets before they start looking good, if the bad ones are at the bottom you won't need to rip them out and do over. You can always remove an offending eyelet by carefully cutting the top threads using a seam ripper, picking it out, and then re-stitching it.

Here are the steps that I follow for making eyelets. Please understand that I am not an eyelet expert, this is just what works for me and gives a nice looking result. Preparation

Mark the placement of your eyelets on your fabric. I like to use a pencil, but you could use chalk or a washable marker. The mark will be destroyed in making the eyelet.

Take your awl and gently push the tip into the middle of the marked dot until the size of the hole is a smidge smaller than you want your finished eyelet to be. Just do one hole at a time. Taking a piece of embroidery floss about 18-24 inches long, split it in half so you have two strands

of 3 threads. Thread your needle with this.

Making the first pass

From the top side of your fabric, insert your needle through the hole you just made and poke it into the back side of the fabric and up to the top side, pull it through, but catch the tail end and hold it with your thumb on the top of the fabric.

Make another stitch the same way, poking the needle through the hole, into the back and up to the front, this time including the tail end, but move the needle about 3-4 threads over from the last stitch and then hold the thread off to the left. When you pull the thread through this time, give it a good tug to the right, you want that stitch to be tight and pull the fabric around the hole into a round shape. Holding the thread off to the left as you are pulling the needle through helps the stitch to settle into the right spot and not just pile on top of the previous stitch.

After you have gotten half way around, poke your awl through the hole again to make it round again, this also settles the threads that you have just placed.

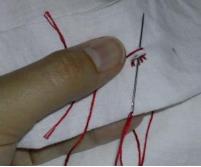
Finish making the first pass, and poke the awl through again to make it round.

The goal of this first pass is just to catch the raw edges and keep the hole open, you just want to have about 10 stitches around the circumference of the hole to keep it open.

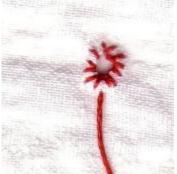
This is what it should look like after step 2



This is holding the thread off to the left as you are pulling the needle through



Finished first pass



Making the second pass - Satin stitch eyelets

This is a good eyelet for corset lacing holes, and other things that need to take strain. I work these right to left around the hole.

Go around the hole using the same stitch as for the first pass, but instead of inserting your needle 3-4 threads away from you last stitch, now it should be inserted 1-2 threads from the last stitch. The aim is to cover the edge of the hole with a smooth bump free satiny row of stitches and not show any of the fabric underneath. This is where holding your thread off to the left as you pull the needle through becomes important, if you don't do this the thread will start to pile up and you will get bumps.

To tie off the thread, I usually just run it under the start of the satin stitches, for about 5-6 stitches and then trim it carefully.

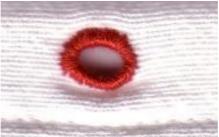
Inserting the needle and holding the thread off to the left.



Giving the thread a firm tug to the right to 'set' the stitch in place



Finished eyelet



Making the second pass - Buttonhole stitch eyelets

These for eyelets look pretty and they are good and strong. I use them for the lacing holes on my corsets. The buttonhole stitch comes out on the outside of the hole, not on the inside, and it locks down due to the way the thread is wrapped. The thread has to be pulled in the right way so that the stitch comes out right, otherwise it just knots itself and doesn't settle in right.

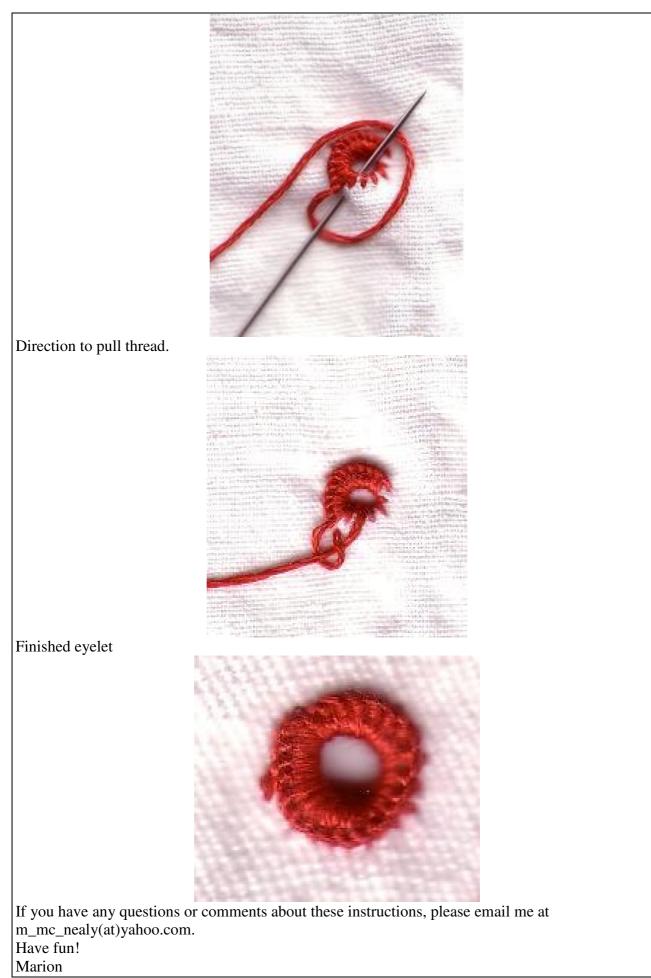
I work these stitches left to right around the hole, opposite of satin stitch eyelets

Insert needle into fabric about 1/8" outside the hole, poke it up and through the center of the hole. Take end of thread and wrap around needle, bringing thread back to wear it started from. Pull needle through, and then gently pull thread down away from hole. Once it is somewhat tight, pull up and then pull over towards the stitch sitting next to it.

To tie off the thread, I usually just run it under the start of the buttonhole stitches, for about 5-6 stitches and then trim it carefully.

Thread wrap around needle

#### Portia's Primers: Corsets



# Pattern Options

Now that you have chosen which corset style you would like to build, I would like to take you through some construction options.

The first thing you will need is a pattern. You have a couple of options:

- Wearing an old t-shirt, wrap yourself in tape. You want to be firmly wrapped, but not so you can't breathe. I find pre-cut strips of fabric tape (the plastic duct tape with a fibre weave in it), or many layers of masking tape works best, as they don't stretch. Remember to make sure you can breathe!
- Use the online Corset Pattern Generator available at <u>http://www.elizabethancostume.net/</u>. This is a really easy way to come up with your measurements for the basic pattern, which you can then modify.
- A well-fitted four panel bodice pattern. If you have a snugly fitting four panel cotehardie pattern, you can use it, or find details of how to fit one at: <u>http://www.sca.org.au/tailors</u> This will often take quite a few fittings, but really works well.
- Take a period pattern from an extant corset (like Eleanor of Toledo's underbodice which is fully drawn out to scale in Janet Arnold's <u>Patterns of Fashion: The cut and construction of clothes for men and women c1560-1620</u> ISBN: 0333382846) and adjust the measurements to your own. This will probably require some help, or a lot of fittings.
- Modify the pattern from a good corset construction book, like Jean Hunnisett's book <u>Period</u> <u>Costume for Stage & Screen: Patterns for Women's Dress 1500-1800</u> (ISBN0887346103)
- Use a period pattern from a period manual like Alcega's Tailor's Pattern Book. You can buy them, or find them online at <u>http://www.vertetsable.com/</u>
- Buy a pattern. Having never done this I do not want to recommend one, but I'm sure if you hunt around well on the internet you will find one. It might be possible to convert a corseted wedding dress pattern, but again I haven't tried this myself.

When you have a pattern you are happy with make a blank out of thick card and keep it aside. You will need it to make new ones in the future, and it will also give you a quick reference for drafting the gown you want.

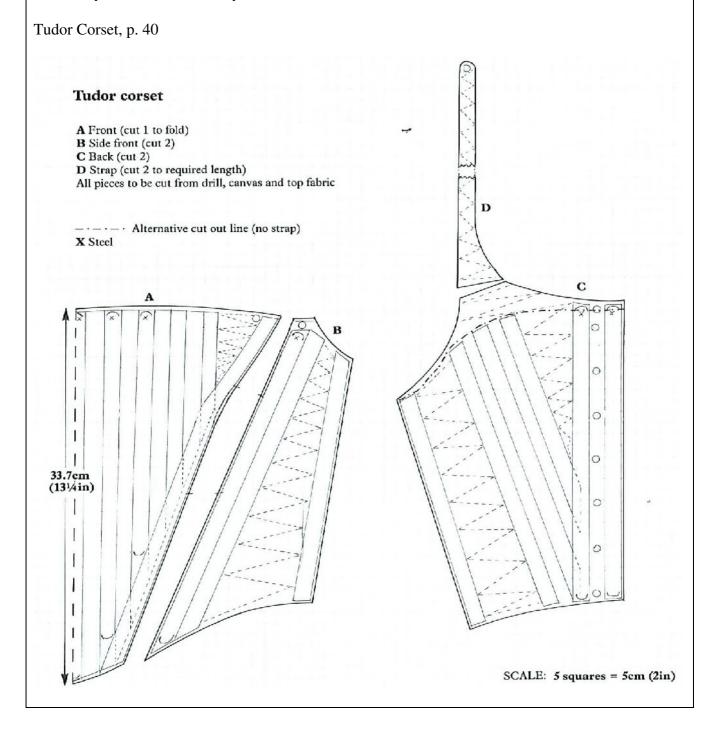
In the following pages, I have reproduced the relevant instructions from <a href="http://www.elizabethancostume.net/">http://www.elizabethancostume.net/</a> as well as both Janet Arnold and Jean Hunnisett's books:

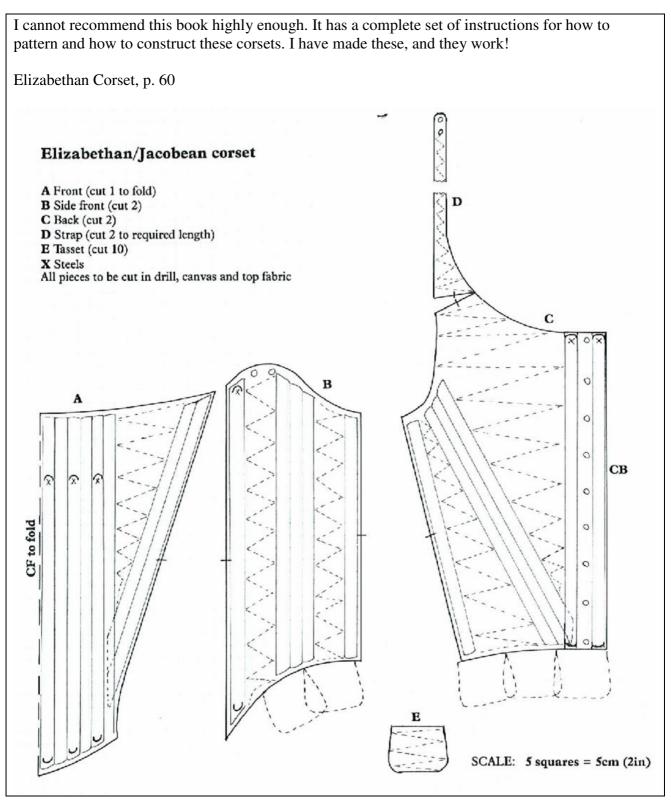
- Arnold was a pioneer of textile archaeology, patterning clothing from grave excavations and extant materials. Her book is the bible for clothing of this era.
- Hunnisett pioneered good looking period costume for TV. Her stuff is in the BBC *Elizabeth R* series, and seems to have been used by most TV and movie productions since.

I have purposely not included the dress instructions that go with this. If you are serious about using their patterns, you will need to buy or borrow a copy. If you are a broke student, look around your local group – someone will have one, and chances are, that person probably also has some useful tips on how to use them!

### Our expert: Jean Hunnisett

From: Hunnisett, J 1991, *Period Costume for Stage & Screen: Pattern's for Women's Dress 1500-1800*, Players Press, Studio City, CA. ISBN: ISBN0887346103





#### **Our Expert: Janet Arnold**

From: Arnold, J 1985, Pattern's of Fashion: The cut and construction of clothes for men and women c1560-1620, Macmillan, London. ISBN: 0333382846

This book is great to give you a really good idea of the fashions of the time, as well as good scale drawings of extant garments.

41C. The velvet lodice is shared in the same way as the satin with two seams at the back. Fragments of the lining, or possibly a binding strip, nemain with matching si.K. This stitching is slightly loose and would appear to have held two layers of material togesher criginally. It is not certain if this matching velvet There are stitch ho es at the wais was a 'pair of bodies' or corset with bents to stiffen WEISew: i; set in the linen lining (Fig 330) or a 'petticoat todies' to support a petticoat, or under-skirt, of tut no trace of any velvet skirt, although the cescription of 1857 would seem to indicate that there was one originally, Further evidence is are closely ard neckine, which armholes r.ceded.

> the hair ret and the leather shoss, but the stockings trace of a skirt for the crimson velvet bedue, nor of velvet to a 'mowrish red. Almost all the right side of the satin skirt has rotted away and there is no bodice fastens at the front with and garters have survived (Figs. 292-4) The velve: 41B.

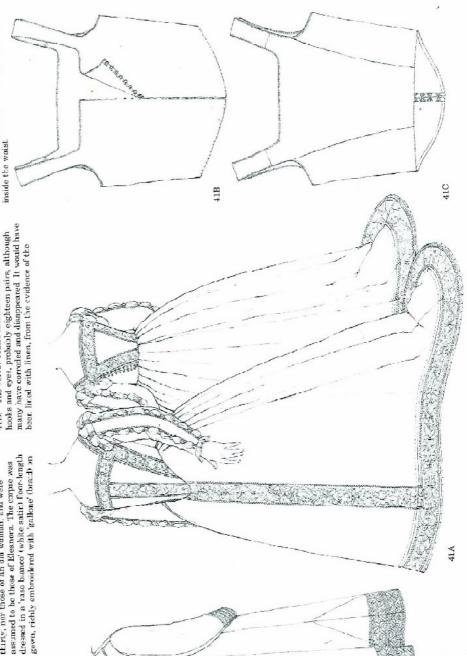
Only fragments now remain: the white satin has The net round her braided hair was sim lar to that in the Brandino portrait in the Uffizi Gallery. The

coffin had been violated and any jewels removed.

stockings and bleck leather shocs, bad y decayed.

the todice, cown the skirt and round the hem Under this gown was snother of 'velluto color chermis?' (crimson velvet) with crimson silk ciscoloured to pale golden yellow and the trimson

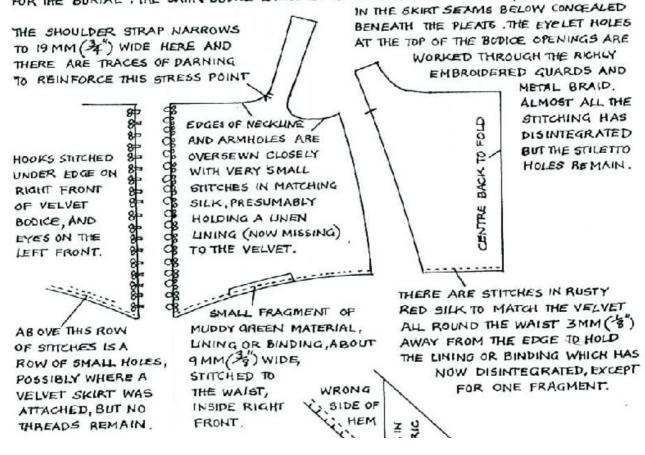
been embalmed. Medical inspection showed that the Archivo Storico Haliano in 1888, explains that when memorial found to record this corpse which had not G.S.P., 'Bsumazione  $\varepsilon$ Ricognizione delle Ceneri dei Vechia of San Lorenzo in Florence. In 1791 all the de'Medici, who died of malaria in 1562, aged forty. Medici coffins, except those in the marble tombs, Principe Medici fatta nell'anno 1857', printed in assumed to be these of Eleanora. The corpse was She was buried in these dothes in the Sagrestia A satin gown and velvet bodice or 'bodies bones were not those of someone younger than Principe of San Lorerzo. An article, inicial ed were removed to the vaults of the Capella di the coffins were opened in 1867 there was no wern by Eleanora of Toledo, wife of Cosime I of an old woman, and were Palazzo Pitti, Florence thirty, nor those 562 A1A 4



Excerpts from p.41

SATIN GOWN, NOW GOLDEN YELLOW RANGING TO PALE CHARTREUSE, BUT DESCRIBED AS WHITE WHEN THE TOMB WAS OPENED IN 1857, DECORATED WITH VELVET GUARDS EMBROIDERED WITH GOLD METAL THREAD. TESTS BY PAOLO BENGI IN 1986 SHOW THAT THE SATIN WAS ORIGINALLY PALE CHARTREUSE IN COLOUR. UNDER THE SATIN BODICE IS A RICH RUST-RED VELVET BODICE, POSSIBLY CRIMSON ORIGINALLY.

THE RICH RUST-RED VELVET BODICE FASTENS AT THE CENTRE FRONT WITH HOOKS AND EYES WHICH HAVE CORRODED, BUT THERE BEEM TO HAVE BEEN IS PAIRS. TWO ORTHREE HOOKS WERE FIRMLY EMBEDDED IN THE VELVET AS IF THE FRONTS HAD BEEN WRAPPED OVER EACH OTHER. FOR THE BURIAL . THE SATIN BODICE LACES UP ON BOTH SIDE BACK SEAMS, WITH OPENINGS



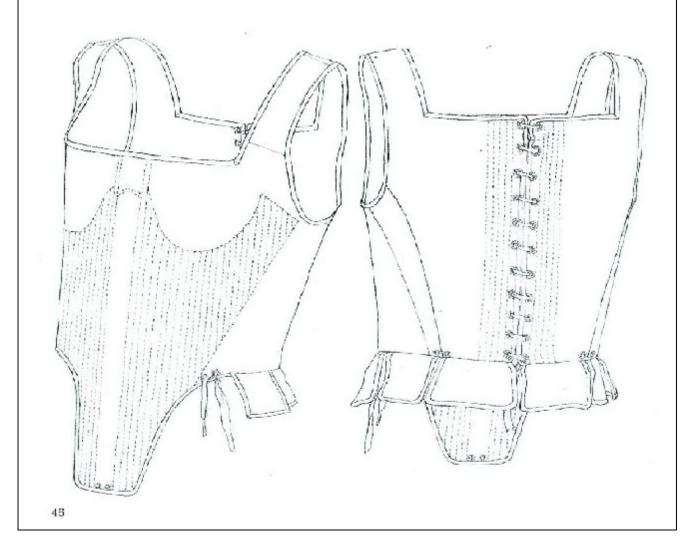
This pattern is an Italian stiffened bodice, which I have made and quite liked - except for trying to get out of the hooks and eyes after a good feast! I did attach a skirt to mine, as with the original, and I found it helped, both with the corset riding up in dancing, and to prevent cutting in on the waist with the waistline of the petticoat.

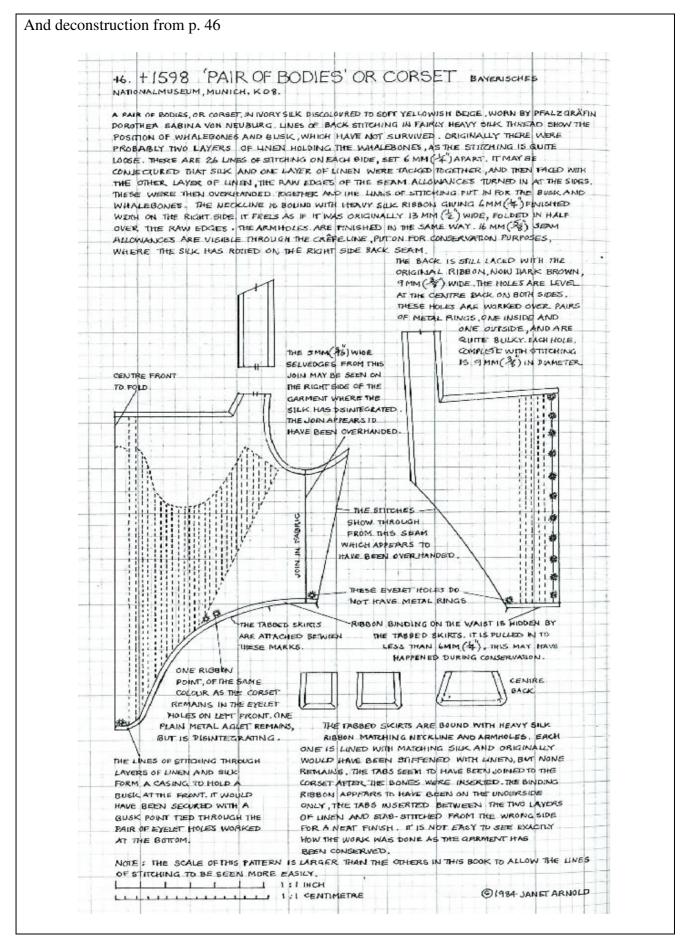
My favourite corset is based off this pattern, and found it quite comfortable. I did however modify the boning pattern to something more like Hunnisett, as I could not get the truly stiff look I needed, nor could I source whalebone (as if!).

#### Excerpt from p. 46

+1598 Bayerisches Nationalmuseum, Munich 46. A 'pair of bodies' or corset, made of lightweight, very finely corded silk, worn by Pfalzgräfin Dorothes Sabina von Neuburg when she was buried in the tomb at Lavingen in 1598, at the age of twenty-two. Originally the corset was probably ivery but has now discoloured to soft yellowish beige (Fig. 327). There would have been a linen lining and probably an interlining as well but this has all disappeared with the decomposing body. The lines of stitching which formed the casings for whalehones or bents (Fig. 330) are in alls thread and have survived. The wide casing at the centre front would have held a busk of wood or horn, tied in position with a bask point through the pair of cyclet holes. The corset laces up at the centre back

through eyelet holes worked over metal rings on both inside and outside for reinforcement. The holes are placed evenly and when fastened the backs would lie unevenly at the waist. The tabbed skirts are bound with silk ribbon and were attached to the enract after it had been assembled. Originally the raw edges were probably hidden between the linen lining and the silk outer layer at the waist but the skirts are now stitched on top of the ribbon binding. The garment was too fragile to allow closer examination of the stitching. Pairs of cyclet holes worked at the sides and back waist were for points to attach a farthingale of the Spanish cone-shaped variety. One of the ribbon points remains on the left side with a single metal aglet or tag still attached to it.





### Our expert: Drea Leed, Online Corset Generator

I have never used this, but many people I respect swear by it. If you end up using it, let me know how it goes. From: <u>http://www.elizabethancostume.net/</u>

## Making a Corset Pattern

Although corset kits and commercial corset patterns are available, an elizabethan corset is simple enough to make that creating a custom pattern is cheaper and less of a hassle. Online Custom Corset Pattern Generator

Enter your measurements, and get illustrated step-by-step customized instructions on how to draw out a pattern.

I came up with this pattern, and it works well enough for me. If you try it out, I would appreciate any feedback you could give me on how it fit, problems you encountered, etc. so that I can make it more generally workeable.

1.) Take your measurements. You'll need:

Waist measurement

Bust measurement

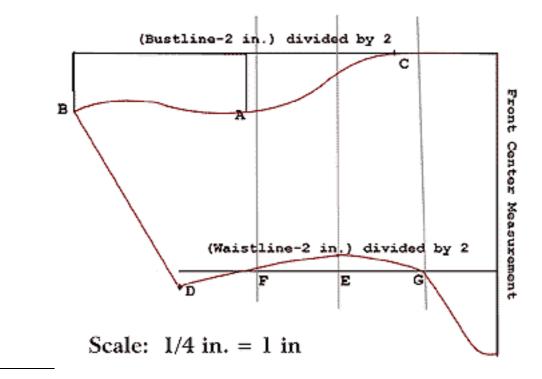
Waist-to-underarm measurement

The front length of the intended corset, from the top center front to the bottom point (if you have a busk, use the length of the busk + 1/2 an inch)

2.) On a piece of large paper--newsprint, a cut-open grocery bag, etc.--take a ruler and pen, and mark out the following pattern:

Take the front length measurement, and draw a vertical line of that length down the right side of your piece of paper.

Take your bust measurement. Subtract two inches from it, and divide the resulting measurement in half. Draw a horizontal line of this length from the top of the front measurement out to the left.



Locate the midpoint of this horizontal line. Measure two inches to the left, and measure down from there:

1 inch if you a size A or B cup

2 inches if you are a size C cup

3 inches if you are a size D cup or larger

Mark this point A. Take that same measurement of one, two or three inches, and measure down that far from the left end of the horizontal line. Label this point B. Then measure from the front center out leftwards to 1/4 the length of the horizontal line, and mark this point C.

Draw a gently curving line to connect points C, A, and B. This is the top of your corset.

Measure down from point A the length of the underarm to waist measurement. Mark this point, and draw a horizontal line all the way across the paper.

Take your waist measurement, subtract two inches, and divide the resulting measurement in half. Measure out this far to the left along the waistline, mark, and measure down one inch. Label this point D. Connect D and B to form the back center of yo ur corset.

Divide the waist line in half, and mark it point E. Divide each half of the line in half again, and mark these points F (to the left of E) and G (to the right of E).

Draw a curving line from the bottom front center of the corset to point G. Make sure the curve at the bottom is wide enough to fit the point of the busk.

Measure up from point E one inch, and mark it. Draw a gentle curve from Points G, to this mark, back down to point F, and then from F to D. This finishes the body of the corset.

#### If you want straps:

If you want a corset with straps, measure along the top curve of your pattern three inches out from the top front center. Mark it. Measure another inch out, and mark that place too. Now draw two five inch long vertical lines up from these points, perpendicular (90 degrees) to the curve, five inches long.

Measure in three inches from the back center, mark it, measure in one more inch, and draw another set of five inch long parallel lines perpendicular to the top curve. (see diagram)

## Now Check the Pattern.

Using this half-pattern, fold a piece of cheap fabric in half, lay the front center of the pattern against the fold, and trace around the pattern. Cut it out of the folded piece of cloth, open the fabric up, and fit it around you to see if it fits.

Make sure that the underarm curves and hip curves are large enough so that they won't rub against your arms and hips. You may have to move the underarm/hip curve slightly to the front or back to get a perfect fit.

Make sure that the pattern comes up high enough in the front. It should not close completely in the back; there should be a one to two inch gap, some of which will disappear when you lace the actual corset on.

If you made a corset pattern with straps, have someone pin them together at the top of your shoulders. Make sure that they are pulled tight enough to provide the bust support you want. If they're too close or too far apart for your liking, change the ir placement on the pattern. Mark each strap where it meets over the shoulder. When you take the cloth pattern off, place the paper pattern beneath it and cut off the strap on the pattern at the place where it met the other strap over the shoulder.

# **Construction Options**

Now that you have a pattern, you are ready to go! Depending on which pattern you have picked, and which silhouette you are attempting, you will need to use different kinds of construction techniques. (statement of the obvious!)

There is nothing frightening about sewing a corset together. You use the same techniques you use for constructing every other costume you have tried. The only real difference is that you have to be pretty particular about the order you sew things together.

Here are some places to get construction instructions:

- Your local group. Truly, some things are easier to do with someone else. Particularly if you need a hand to hold while you try this for the first time.
- Jean Hunnisett's book has a really detailed step-by-step that you can use even if you don't use her pattern. And reasonable fool proof drawings.
- If you are going to make up a corset boned with rope, then there is a fantastic online website for you, that will take you through the process (reproduced below) as well as through great garments to go with it: <u>http://www.elizabethancostume.net/</u>
- Or, if you want a different perspective, Curious Frau uses the same pattern to achieve German lines: <u>http://www.curiousfrau.com/Diaries/CordedCorset.htm</u>
- If you are making up a corset based on the online corset generator, then you can stick with the same website. In fact, even if you are making it up with other instructions, you should really check this website out, for fantastic details on corset history, and styles, as well as a deconstruction of the Effigy Corset, which is an extant one from Elizabeth's time (reproduced below).

## Our Expert: Hemp (Soft) Boned Corset

Again, I haven't ever tried this, but I have seen this work for early renaissance costume reconstruction, particularly Florentine Italians formats like Ghirlandaio. From: <u>http://www.festiveattyre.com/research/cording/cord.html</u>



Everything you ever wanted to know about boning with hemp cord, but were afraid to ask!

After posting my experiment with hemp cord boning in my <u>Florentine Dress Diary</u>, I was thrilled to get some wonderful feedback from other costumers who were interested in trying it out for themselves. If you haven't seen the diary, you might want to go back and check out the <u>bodice construction page</u> to get more of the background info on using hemp cords--the

hemp stuff begins half-way down the page. You can also check out the finished corded <u>Florentine</u> <u>bodice</u> or my <u>corded corset</u> to see what this type of boning looks like in a finished garment. I decided to make this page to go through the process step-by-step, give links to suppliers, and share the work or other costumers who have made their own versions of bodices or corsets stiffened with cord. For the supplies, you will need:

Hemp cord I have used both 1/8 inch and 1/16 inch hemp cord, and both thicknesses worked very well. You can often find the stuff in the jewelry section of craft stores such as Hobby Lobby or Michael's. I have had several people tell me that it is now carried at Wal-Mart, and you might also try looking in any store that sells jewelry or beading supplies. After a quick look online, I did come up with a few sites that sold this stuff, but I'm sure there are plenty more! So far I have found:

<u>Hemp Traders</u> <u>Hemp Sisters Inc.</u> <u>Wooded Hamlet Designs</u>

Although using hemp seems to be an important factor in getting such unbelievable support, I've also heard of people making slightly softer versions using materials like jute twine, upholstery cord, or cotton rope.

And for you truly insane authenticity freaks out there, I recently discovered that tightly packed rolls of linen fabric work really well too. I got the idea after seeing a photo of a surviving 15th century gown with tubular pleats padded with rolls of linen. I tried making some small, 1/8 inch rolls of linen instead of hemp cords, and they actually work rather well. But this shouldn't be too surprising since linen and hemp fibers are virtually the same thing. To be technical, linen can be made from either flax or hemp, and many linen fabrics from the period are made with hemp fibers--you can only tell the difference with a microscope. So anyway, if you twist linen fabric tight enough and put them in very snug channels, it's basically like making homemade hemp cords. My version wasn't as stiff as the store-bought stuff (you could add some starch or paste for a period stiffener), but it works at least as well as cotton cording or jute twine. I thought about making an entire pair-of-bodies like this, but it works best if you hand-sew the channels so you can get them really tight, so I gave up after a few rows. This type of cording would take quite a bit of time to make correctly, and I'm just not crazy enough to try one right now.

Fabric I used two layers of linen for my version, and my theory is that the elasticity of this material is what makes it fit the curve of the bust so well. More experiments need to be done before I can say for sure, but I think you could substitute heavier fabrics and end up with a more cone-shaped silhouette if you prefer.

Threading tool Although it is possible to sew the cord into each row with a cording foot as you go, this isn't recommended since it will warp the fabric pretty badly if you have a lot of channels. I found that it was much simpler to sew all of the channels first and then thread the hemp through the rows. I made a tool to do this with floral wire twisted together with a loop on one end, but my friend Melissa came up the brilliant solution of using a long crochet hook instead.

I also received another great suggestion from Nan Bradford-Reid, who suggested using an umbrella rib for a threading tool (the old-fashioned kind that's just a straight metal rod). You string a piece of cord that's small enough for the hole, but strong, through the hole and then use that like the eye of a needle, stringing the hemp cord through the loop. Very cool! Scissors

Sewing machine I used my regular 5/8 inch presser foot to space the rows. The distance from the needle to one edge is just over 1/4 inch, which is the perfect size for two cords of the heavy stuff, or four lighter weight cords. I also used a zipper or cording foot to go around the outside edges after the cord was in place.

# Adding the cord boning



Step 1: sew the channels Like I said before, I used the width of the presser foot as my guide, but your rows could be wider or smaller depending on the size or number of cords in each row.

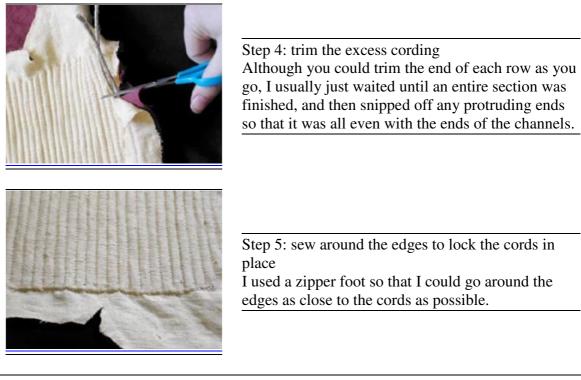


Step 2: thread your tool through a channel A piece of cord that is slightly more than twice the length of the channel is threaded through a loop in the end of the wire.



Step 3: pull the doubled cord through to the opposite side

It might be a bit hard to thread the cord in places, but just keep tugging... you'll get it eventually! I also made sure the cords were not twisted in the channel, but laying flat, side-by-side.



After your entire corset or bodice has been boned, you then have several options for finishing. Unlike other forms of boning, the tips of the cords are soft and blunt, so you don't have to worry about them poking out through the fabric. You can sew a row of binding around the edges for a nice clean look, and I recently discovered that a sewing machine will sew through hemp cords quite easily. You could also turn in the extra material at the edges and whip-stitch it to the inside like you would make a hem. On my version, this corded layer will provide internal support for my actual gown, so it will be put together just like a regular bodice with lining.

### Other miscellaneous information

Is cord boning right for your project?

Before you start making a corded bodice or corset, you first need to decide if this method of stiffening is really right for you. When I first tried using cord boning, I chose it because it would still bend and curve to fit the body... I never really intended for it to replace the rigid boning that you usually use for cone-shaped silhouettes. However, several other costumers went on to discover that it can also be used in Elizabethan-style corsets, but your methods probably should be altered a bit if your goal is to have a perfect flat-fronted look. If you try making a corded garment and are still getting an unwanted crease or buckling across the torso, I would suggest replacing several of the rows of cord with something stiffer; possibly heavy-duty cable ties, steel boning, or plastic boning. You might have to experiment with the number of rows necessary to give you the results you want, but this would help support the structure of the bodice or corset and add a little stiffness. You could also try making a wooden busk for the center of the torso. This is a very period method for making a corset keep its flat front, and it should stop the creasing and give you a good cone-shaped look when combined with hemp boning.

So when should you use cord boning? Each costumer will have to make that decision for herself, but here are my recommendations based on my own experience and the information I have received from the feedback of others who have used these methods.

Cord boning as the only form of stiffener:

Styles of dress that have a smooth surface, but still show a definite curve at the breasts (such as early 16th century Italian, German, Flemish, and some lower-class styles).

Working clothes where a free range of movement is more important than a perfectly flat torso. Garments for children or small-busted women who do not need a lot of support.

Corsets for people who hate corsets or are looking for more comfortable alternatives to rigid boning.

As a "spot" stiffener for moderate support on outer garments (for example: as an edge stiffener next to lacing rings, hooks, or buttons).

Cord boning reinforced with some rigid boning:

Styles of dress that have a more cone-shaped torso, but still show a bit of curve at the breasts. Garments for women who are of more Rubenesque proportions or have a larger bust.

Clothing that will be exposed to extreme heat or are likely to get wet. (hemp cord loses much of its rigidity when it becomes wet from excessive sweat, rain, or a water-hose down the back! It will become stiff again when it dries, but it may droop a bit until then.)

Bodices or corsets with an extended point at the waistline.

When cord boning should probably NOT be used:

Upper-class or late-period styles that require an extreme cone-shaped silhouette.

When a bodice needs to look perfect and you don't want to take any chances of it ever buckling under any conditions.

Garments that need to be 100% documentable. I wish I could say that I have proof that they used this stuff, but at the moment it's still just a theory.

None of this is meant to be negative or to discourage people from trying cord boning, but I just want everybody to be informed and aware of the instances where it might need a little back-up. Every material has its strengths and weaknesses, and I just want to encourage you to think about your priorities when making a specific costume so you can pick the type of boning that would work the best for you.

# Washing:

One of the biggest perks about this style of boning is that it is completely wash-safe and sweatproof. After washing a small corded sample, I noticed no major change in the structure or strength, and in fact, hemp is well known for its ability to withstand the elements. However, a few questions about washing this material did arise, and another costumer, Mary Temple, has decided to make a corded corset of her own and has sent her words of wisdom on the subject.

Mary warned me that hemp cord might shrink in the wash, so she experimented with pre-washing her cord. She found that the cord did not change much in length, but it did expand a good bit in diameter. This might be due to the agitation and a general loosening of the twisted fibers, so she concluded that it would be better to construct the garment before washing. The cords sewn into my sample piece did not seem to expand or shrink from their original size, so this does not seem to be an issue with cord that has already been sewn into channels. And by the way, I would recommend that you still pre-wash your fabric before sewing any rows. Mary also noted that a corded garment should be safe for machine washing, but probably should be air dried. Dealing with shrinkage:

After hearing a few more reports from others who tried making corded bodices, I realized that there are a few things that need to be emphasized about constructing a garment that is boned with cords. First of all, the cords do take up more space than modern flat boning, so there is a bit of "shrinkage" involved once the cords are in place. I haven't figured out a precise ratio for this, and it seems to vary depending on how stretchy your fabric is (my newest corded corset was made of some very stretchy linen, and it did not appear to shrink at all) However, be prepared for a garment to get a bit smaller with the addition of the boning, and the more channels there are, the more it will shrink. You could counteract this by just using your natural measurements without reducing it by the standard 2 inches for the "squish" factor. The boning will make the corset a bit smaller than your

normal size, and when tightly laced, it should reduce your waist and bust to a comfortable corseted shape. Many corset makers advice that these garments should have an inch or two gap at the opening anyway, but you still might want to adjust your pattern to allow for this fact. The shrinkage also comes into play with the placement of shoulder straps. When the body compresses across the width of the torso, attached shoulder straps move a bit more towards the center of the body as well. This is a pretty small amount, but if you cut an outer decorative fabric from the same pattern as the boned layer, the straps will not line up exactly once the cording is added. You can fix this problem by drafting a second pattern after the boning is added (using the boned layer as a guide), by making the outer shoulder straps wider and then cutting them down to match, or by attaching the shoulder straps after the boning is in place. If your corset is separate from the gown and will not have a decorative outer layer, this shouldn't be a problem... but you do need to think about this if you are doing a boned bodice or decorative pair-of-bodies. And last but not least, if you are matching up a decorative outer layer with internal boning, beware: the two layers will not want to play nice together! The inner layer will become very "elastic" due to the shrink factor from the cording, and it will be much smaller when at rest than it is when worn. If you are trying to sew another fabric to this growing and shrinking internal structure, it will probably be a royal pain in the patoot! That's not to say it can't be done, just be aware that it may not be easy. I made mine work by stretching and pinning the outer layer of fabric to the boned layer while it was being worn, then basting it in place until it could be sewn down. When you take it off, the inner layer will shrink down and pucker up and look really weird... but it somehow manages to look right when it is on. A dress form helps quite a bit with this method, and you can read more about this problem in the Sempstress's new dress diary (go down to the 04.27.02 update). I'm sure there are quite a few other ways you could counteract this problem, but the easiest way is to just make the boned layer separate from the outer gown or just let the cording channels show. And actually, there are a few examples of 16th and early 17th century dresses with what looks like boning channels, like this one, but they are a bit rare. A garment with internal cord boning can turn out very nice, and

I absolutely love my corded Florentine kirtle, but it is a slightly more complicated thing to deal with.

As a later post-script to this section, I later experimented with using the lighter-weight 1/16" hemp cords, and they were so small that it did not cause any shrinkage at all. For more info on that project, check out my <u>Ghirlandaio diary</u>.

# Pictures of other corded corsets or bodices

After all of my lunatic ravings about the wonders of hemp cord, a few of my online costuming buddies decided to join in on the fun! I think it's really great to see the different version of corded bodices so that you can really see what this stuff is capable of. <u>Melissa Heischberg</u> whipped up an amazing version of the effigy corset, and you can see the in-progress pictures of it of half way down her <u>new projects page</u>. (and be sure to check out her corded petticoat while you are there!) Then not to be outdone, <u>Sarah Goodman</u> also came up with a lovely pair of corded stays as a part of her <u>Tudor dress diary</u>. Melissa and Sarah have both been a huge part of this project, and while I just happened to be the first one to try the theory out, I share full credit for this idea with both of them! :-)

Another one of my talented online costuming friends, <u>Tea Rose</u>, just sent pictures of her almost completed strapless corded corset, and I was absolutely thrilled to see how well it is turning out! It is just pinned in the back for the pictures you see here, so it will look even better after she can lace it tighter, but you can already see how well it is supporting... and like Sarah, she also just used one cord per channel instead of two. Pretty darn impressive if you ask me!

Portia's Primers: Corsets



I was really excited to get a new set of pictures and a report from another costumer tried this technique. Linda Fikejs writes:

"I found your web page on "Boning with Hemp Cord" and tried it on a corset. I am very pleased with the results. I can't believe how comfortable it is. And what great back support. The only thing I didn't realize is that this method reduces the size of the corset (1 1/4 inches becomes a finished size of approximately 1 inch), so I had to put a modesty panel in the back. But I don't consider this a big problem because when I lose weight (yeah, right!) I'll be able to still wear it."



And here's another gorgeous Elizabethan-stye corset made by <u>Alys Peacocke</u>. Here's her tips for construction:

"My corset is made of zesty yellow linen, and the edges are bound in a rust colored ultrasuede. I found that my corset still buckled under the bust unless I put two spring steel bones in the front, which gave more support but doesn't make the front line too rigid. Two steel bones is much better than fifty...the finished corset is very comfortable."

Portia's Primers: Corsets



These next pictures were sent to me by <u>Tish</u>. She also passed along a cool <u>close-up shot</u> of the boning channels and some great comments about the results:

"This pair of bodies is made from two layers of medium weight white linen. I used two rows of hemp per channel. The bodice is designed to go under a Florentine gamurra, and after a 90-degree-plus day of sweating in it, there was no buckling or compromising of the bust curve. The side-back lacing seemed to make it sturdier than another one I've made with lacing in the back. The wearer, 4 months pregnant, reports it to be extremely comfortable - much more so than a bra."

And now Tish has also made a beautiful corded corset for herself as well, which you can find in her <u>dress diary</u>.



A few more costumers have recently created garments using cord boning, and have created fabulous diaries telling about their experiences. The first one is by Marthe Glad Munch - Møller, a costumer from Norway who used sheets of plastic to reenforce the front of an effigy-style corset. You can see her diary <u>here</u> and you can also read about her solution for <u>adjusting the pattern</u> to make a front closing corset fit perfectly. The second <u>diary</u> is by Ben Pung, who has made a beautiful Flemish kirtle for his wife that is stiffened with a lighter weight hemp cord. He also sewed all of his boning channels by hand, which I think is just amazing! And finally, Jenny-Rose White has made a fantastic corded bodice for her new Italian gown that you can read about in the underpinnings section of her <u>dress diary</u>.

Here's there latest new corded corsets on the web. First, Marion wrote a nice <u>diary</u> about the making of her corset, which uses the lighter-weight hemp cord. Sandy also made a very cool corset using sea-grass rope, which you can see at the bottom of her <u>undergarments page</u>.

## **Our Expert: Constructing the Effigy Corset**

Here is an extant alternative I have not tried, but would like to. From: <u>http://www.elizabethancostume.net/</u>

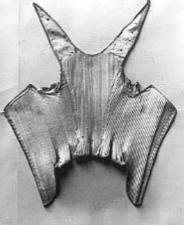
# The Effigy Corset: A New Look at Elizabethan Corsetry by <u>Drea Leed</u>

Discovering the Effigy Corset Constructing the Effigy Corset The Good, the Bad & the Ugly: Notes on my reconstruction of the Effigy corset Drafting an Effigy Corset Pattern

## Discovering the Effigy Corset

In 1995, the effigy of Queen Elizabeth residing in Westminster Abbey was unclothed for study and repair to the garments in which she was dressed. Once the gown and hoopskirt (dating from the 17th century) were removed, the effigy's corset and drawers were visible for the first time since the 1930s.

Janet Arnold, the premier Elizabethan costume historian, spent some time examining these underpinnings. After extensive study, she pronounced them contemporary to Queen Elizabeth's death in 1603, or perhaps slightly earlier to just before the turn of the century. This is a windfall for Elizabethan costumers, as it doubles the number of extant Elizabethan corsets available for study: previously, costumers had been limited to Pfaltzgrafin Dorothea Sabine von Neuburg's pair



of bodies, dated to 1598, as a source for their own corset patterns and construction methods. This newly-discovered pair of bodies has three sections: one back section and two front/side sections. The back section has slightly curving side back seams and two straps, wide at the base and narrowing to points, which start from the center back and radiate out at a 30 degree angle from vertical. The two front/ side sections have a flat front neckline and a scoop under each arm. The front center point is quite long and wide at the bottom, echoing the line of the current fashion for long stomachers, and the straps tie to the front of the corset just in front of the arm, creating the wide neckline necessary for these same gowns.

wide neckline necessary for these same gowns.

The corset laces up the front, with 29 small eyelets on either side, approximately 5/8 of an inch apart.

This pair of bodies is completely boned with 1/4 inch wide strips of whalebone slipped into channels between the outer fabric and lining. There are two wider strips of whalebone, a little over 1/2 inch wide at the bottom and broadening to 3/4 inch wide at the top, placed on either side of the front center opening and slanting in towards the bottom center slightly. The boning extends into the tabs, which are quite wide and about 3 inches long, and stops short a little less than an inch from the top of the corset, where a line of stitching keeps it in place.

The corset is edged with fine leather, originally apple-green in color, around the bottom, top and straps. The corset itself is made of fustian--a linen/cotton blend, woven in a twill pattern. The front and back sections appear to be finished on the back sides and whip-stitched together along these seam lines.

There are bits of linen under the arms, presumaby "sweat shields" of some sort; their precise purpose is unknown.

#### **Constructing the Corset**

Once I saw the photograph of this corset and read Arnold's analysis of it, I decided to make a reproduction of my own, to see for myself how this corset pattern fit, moved and shaped the body. As I only had one photograph and one descriptive article to go on, this is by no means a definitive "reproduction". Further examination or publications on the Effigy corset may result in changes to my construction methods, next time around.

#### **Corset Pattern:**

I took my pattern off of the photograph of the effigy corset in the Westminster Abbey effigies book and scaled it up. (a drawing of the original pattern, taken from the photograph, is shown above.) As my waist is nowhere near the petite 21 inches of the original corset, I had to do some significant pattern alterations to create a corset that would fit me. Even after I had enlarged the photograph and taken two inches off of my waist and bust measurements to accommodate "squishing", I had to widen the front top to accommodate a larger bustline, broaden the back, and increase the size of the waist as well as the front length of the corset to keep everything in proportion. I kept the seam placement and the proportions of the pieces as close to the original as possible.



#### **Materials:**

As I did not have a cotton-linen fustian available, I chose to make the corset out of two layers of light but strong cream-coloured linen--somewhat sturdier than hanky linen, but not as heavy as table linen. I found some cream-coloured kidskin leather for binding the edges of the corset. The green leather from my only source bled unfortunately when exposed to moisture, and the last thing I wanted was green stripes around the waistline and sleeves of my linen undershift. Boning:

As for the boning: whalebone, sadly, was out of the question. Artificial whalebone is available but quite expensive; so I chose, for this trial run of the Effigy corset, to use a boning material mentioned in accounts of the time and seen in surviving early 17th century stomachers: bents, or reeds with an average diameter of 2 mm. I used naturally grown broomstraw as a substitute. (Just the other day I found a place that sells 1 & 2 millimeter reeds specifically for boning: <u>Victoria Louise, Mercers</u>. Next time, I'll use these reeds.)

For the two wider pieces of whalebone going down the front, I used a doubled layer of <sup>1</sup>/<sub>2</sub> inch wide spring steel boning.

#### **Construction:**

I started by half-finishing the three corset sections. Placing the lining and outer fabric right sides together, I sewed the front section pieces together at the center front and the back side seams, trimmed the seams, and turned the piece right side out. I finished the back piece on the sides with the same method. The top and bottom edges of the fabric were trimmed even with the edge of the pattern, as no seam allowance was necessary.

Next, I sewed the boning channels--all 126 of them. The channels started at the bottom of the tabs, and ended 1 inch from the top of the corset. I sewed the seams by machine, as I didn't want to take overlong in creating a first trial version of the corset.

Once the boning channels were sewn, I stuffed bundles of broomstraw (4 or 5 straws in each channel) into the corset. At the center back and center front, the broomstraw had to be spliced into longer bundles and bound with thread to make bundles long enough. I boned the front edge opening, left a channel empty, and boned the one on the other side; in this empty channel the eyelets would be sewn.

Once the boning was in place I stitched across the top of the channels, leaving an approximate 1 inch strip of unboned fabric around the neckline and underarm of the corset. I also stitched about <sup>1</sup>/<sub>4</sub> an inch from the bottom , to keep the broomstraw in place until the tabs were cut and the leather binding applied.

I then butted the finished back side edges of the front and back pieces together at the back sides, where I stitched them together with a whipstitch using heavy linen thread. Only now did I cut the tab lines to create the tabs in the bottom of the corset.

All that was left was the leather edge-binding. I took a thin strip (1 inch wide) of cream-colored kidskin, placed it  $\frac{1}{2}$  an inch from the edge of the front bottom of the corset, and began stitching it to the corset with linen thread. I stitched through the broomstraw and back out again. I had to stretch the leather at the top of the tabs, and gather the edges at the bottom corners of the tabs, but all in all it went smoothly once I got the hang of it.



Once the corset had the leather strip sewn to the outside, I turned it over, stretched the leather strip around the raw bottom edge, and sewed the other side of the leather strip on the inside, ½ an inch from the edge. This bound the broomstraw in so that it wouldn't poke out the bottom of the corset. I then repeated this process on the top, which was much easier to sew as there was no broomstraw against the top edge. I sewed across the front neckline, around the armhole, up the strap and down to the center back, and did the same on the other side. Needless to say, I had to use several strips of leather; I overlapped the end of one strip with the beginning of the other and stitched through the join a couple of times when this occurred.

I finished up the corset by sewing a lacing hole at the tip of each strap and a matching hole at the outside of the neckline, just in front of the armhole. Then I sewed the lacing holes down the center front. I made all of these lacing holes by poking a hole in the corset with an awl, stretching the hole to the size I wanted, and whipstitching around the hole with heavy linen thread.

The entire process took around 15 to 20 hours. Most of this was taken up with coaxing spliced bundles of broomstraw into narrow channels and attempting to conjoin leather binding, linen fabric and broomstraw with nothing but a needle, heavy thread and a leather thimble.



#### The Good, the Bad and the Ugly: notes on my reconstruction of the Effigy Corset

Discovery #1: broomstraw shrinks corsets.

Yes, I had known this theoretically...but until now had used flat spring steel or poly plastic or hoopskirt boning to bone my corsets. When I measured the corset and found that the corset was a good two inches smaller around then it had been before I boned it, the point was really driven home. Discovery #2: Front-lacing corsets allow no margin for error. If I had made this discovery with a back-lacing corset, it wouldn't have been a problem; I simply would have had a wider gap between the two back edges than I'd planned. A front-closing corset, unfortunately, has no room for lacing adjustment, as does a back-lacing corset; so I had to cut the danged thing up the back, bind the back edges with leather, and make 46 more lacing holes. Now I had a front and back closing corset, and could adjust the size with the back lacing and still have the front lacing close all the way. Discovery #3: Broomstraw stretches!

After all the work of adding back-lacing to the corset, I once again tried it on. I found, to my surprise, that after 10 minutes



or so I could lace the corset so that it no longer had an inch-and-a-half gap at the waist or the top of the back (although there was a gap of about an inch and a half at the bustline). When put under pressure, the broomstraw shifts within the channels and flattens out slightly, allowing the corset to stretch ever so slightly. I laced the corset closed at the back waist and from then on could put it on and take it off with no fitting problems.

Further joys of broomstraw

After this initial re-engineering of the corset, I found it wonderful--due, in no small part, to the boning material. I had been dubious about the support broomstraw would provide, but found it every bit as firm as poly boning (though not as firm as spring steel.). Even better, when I took the corset off after a long day's wear, the broomstraw didn't keep the curve of the tabs and front point like a corset boned with poly boning did. (Note: after a year+ of wear, the tabs have formed a permanent curve outwards and the straw has formed to the shape of my waist.) In addition, it breathed much, much better than steel or plastic and weighed next to nothing



compared to these other boning materials. It was the coolest and least noticeable corset I've ever worn. After wearing it for a day in the hot sun, the corset itself was quite damp with sweat; but I hadn't felt especially warm. Fitting quirks and happy discoveries

After trying on the corset, I discovered another slight glitch: The back of the corset stood out from my neck when I moved my arms back, even with the straps tightly laced to the front of the corset. This was because I had taken the angle of the straps from a photograph of the corset itself. These straps were cut on the bias, and had stretched to a wider angle over time. By narrowing the angle at which the straps diverged from the center back (read: putting a dart into the shoulder straps) and stretching them so that the points met the front lacing holes, this pulled the back closer to the neck. It still stood out slightly, but I found that this actually made some bodice patterns (which make no accomodation for any curve in towards the neck at the top of the bodice back) fit more smoothly, rather than gapping at the top back as so many unaltered bodice patterns do. In fact, the high boned back of the corset is stiff and stable enough, and the straps tight enough, that a supportasse and open ruff could be pinned, laced or otherwise attached to it with no fear of slipping and sliding ( as can happen when an open ruff is attached to a bodice).

The straps were narrow enough in the front, and placed strategically enough that they didn't dig into my armpits when I reached forward, as every other corset with straps I've ever worn eventually seems to do. The leather edging of the straps provided some padding, and their bias cut allowed the arms and shoulders to move freely while keeping the straps firmly in place. It also made the straps conform to the outer curve of the shoulder. (The leather binding allowed this stretch, whereas a normal fabric binding would not have). The neckline created by the narrow-pointed straps tying just in front of the armpit was wide enough that this corset could be worn with all but the most wide-necked Tudor gowns. In fact, the neckline was identical to that of fashionable 1590s gowns, perhaps giving us some insight into the patterning for these gown bodices.

The two spring-steel bones down the front didn't make the corset perfectly flat (the original wasn't either), but kept it from sticking out over my abdomen while allowing me to bend forward. The wide channels for the spring steels themselves bend slightly once the corset is on, which made the bottoms of the spring steels twist inward a bit. This problem wouldn't occur with whalebone or artificial whalebone. The placement of the tabs (one directly in front and one just behind the hip) kept them from digging into my hips or over-bending the tabs when I bent sideways, as well as accentuating the curve of my waistline.

While making the corset, I didn't think much of the fact that the boning stopped an inch short of the top. Once the corset was finished, boned and worn, however, I made a happy discovery: this unboned portion flared out distinctly under the arm and at the neckline, keeping the corset bones from digging in and creating a smoother line at the bust.

The front opening of the corset isn't a straight up-and-down line, as one would expect. It flares out slightly at the bustline, which gives a more flattering line to the corset as well as providing more support for larger bosoms and more cleavage for smaller bosoms. It creates a more curved bust, rather than the completely flat bust that a corset with a busk down the front creates.

For more pictures of this corset and the garments worn over it, check out <u>Lady Drea's Wardrobe</u> <u>Unlock'd</u>.

-**\$**-

Effigy Redux Well, it's a year later, and although I haven't made my "real" repro version of the corset, I have worn it dozens of times and others have made it and commented on the fit. Here's a few interesting facts about it:

One friend's corset was made with the 1.5 mm reed boning sold at Victoria Louise, Mercers. The support was impressive but the ends of the reeds tended to poke and fray the fabric. One would need very sturdy fabric or would want to sand the ends of the reeds (or both) before making the corset.

This corset was also made of a twill cotton-linen fustian, like the original effigy corset. After making it and lacing it on, the twill turned out to be so elastic that two inches had to be taken off of the pattern. This could be used to advantage, allowing the corset to shrink and expand, but twill doesn't spring back well. This should be a factor if you're making your corset out of a twill fabric such as denim.

My friend Gwynne wrote up a document on how she drafted her effigy corset pattern. You can read it at <u>Patterning the Effigy Corset</u>.

After a year of hard use, the straw in the tabs has formed to my body and now flares out permanently, like the tabs of the original. The straw has not broken down and still provides the same amount of support that it did originally.

The long front section, necessary for the deep stomachers of the late Elizabethan fashions, was very inconvenient. It kept rubbing and poking my legs when I bent over and protruded slightly out over

the abdomen, due to the lack of a wooden busk in the front and my less-than-lissom figure. Unless you're planning to wear it under a late-Elizabethan bodice, I recommend slicing 4 or so inches off of the front length.

If you want the busk down the front, you can stitch a busk pocket to the inside of one side of the front, slip the busk in, and lace the corset closed over the busk.

This still remains far and away the most comfortable and convenient corset I've ever worn! I don't know if I'll ever use a different type again.

Other Effigy Recreations

Sarah Goodman's Effigy Corset and Second, Improved Effigy Corset

Marthe Munch's Effigy Corset

If anyone else has made a corset based on the Effigy corset, I would be very interested in hearing their comments and about what they've learned. Please <u>Email Me.</u>

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## So where to from here?

The first place I would recommend is your local group. Did you know that you are surrounded by heaps of people who will have tried that exact look you are aiming for? Trust me, ask around and you will find people who can help you. You might be surprised at who can or will.

I would like to heartily recommend having a trawl through the following websites:

#### The Costumers Manifesto

This is my first place to shop for information on costume. It includes a really wide range of resources. <u>http://www.costumes.org/history/100pages/costhistpage.htm</u>

#### The Lochac Tailors Guild.

A really useful place to get information and helpful contacts. <u>http://www.sca.org.au/tailors</u>

#### MedCos

This is a costume forum, and leads to many more. This is a great way to tap into a lot of expertise. http://slumberland.org/moodle/course/view.php?id=5

Some great **personal websites** that deal with patterning corsets (and the rest of the ensemble). Here are a few of my favourites:

Elizabethan Costume: <u>http://www.elizabethancostume.net/</u> Mode Historique: <u>http://www.modehistorique.com/</u> Festive Attyre: <u>http://www.festiveattyre.com/</u> Renaissance Tailor: <u>http://www.vertetsable.com/</u>

And remember – we do this for fun, so if its not something interesting that excites you, find something else to do – there is heaps more to Medieval than costuming. Don't be afraid to admit it!