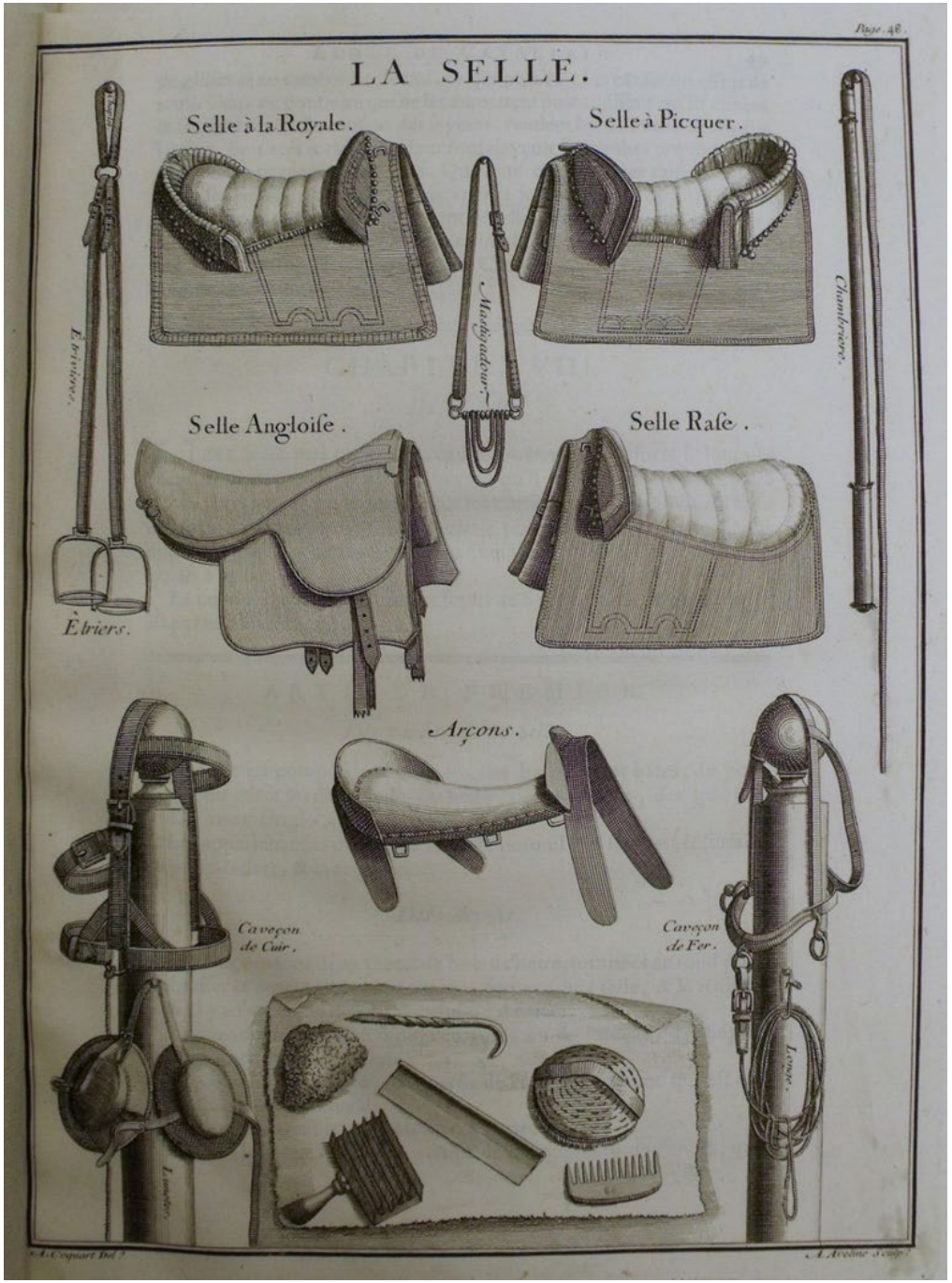
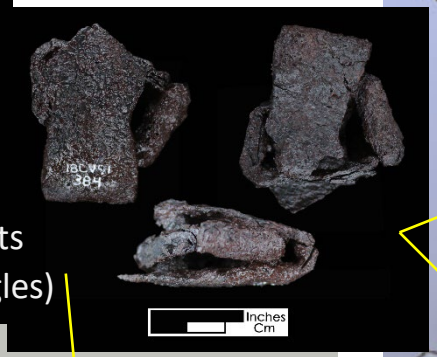


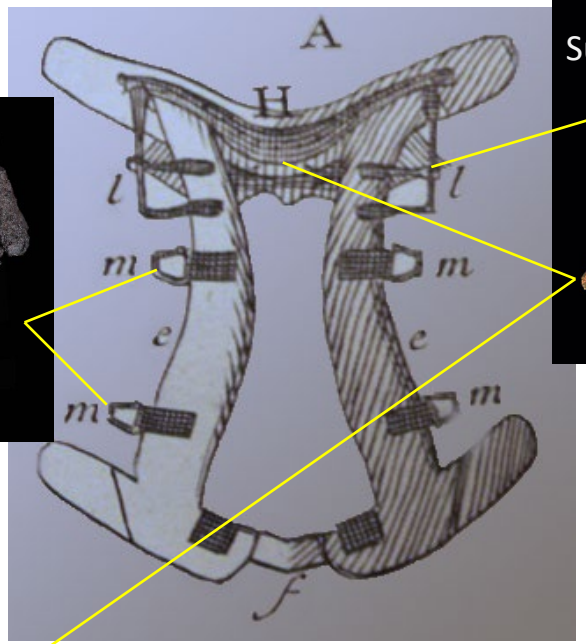
BRIEF VISUAL GUIDE TO EQUESTRIAN ARTIFACTS OF THE 17TH & 18TH CENTURIES

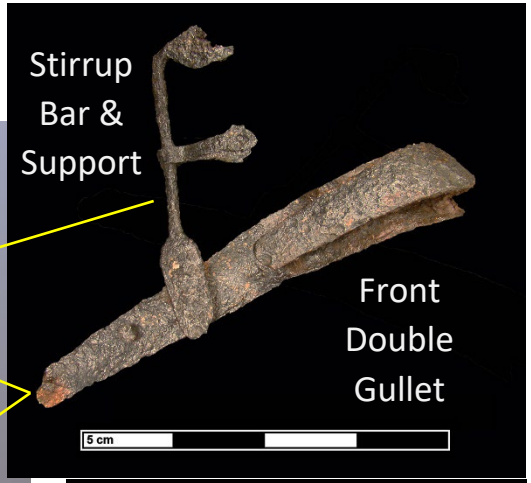
Contents

Late 17th-Century/18th-Century Saddle Parts



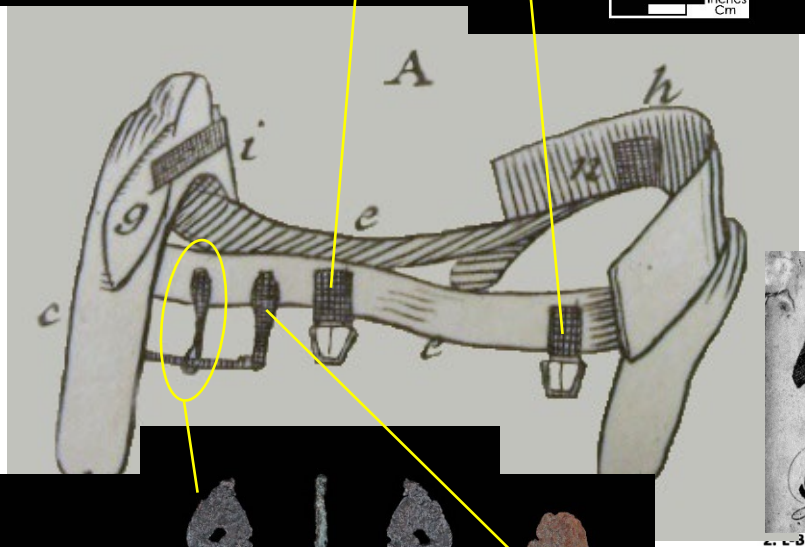
Sivets
(3 Angles)

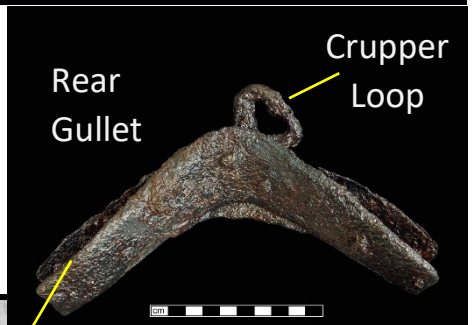




Stirrup
Bar &
Support

Front
Double
Gullet



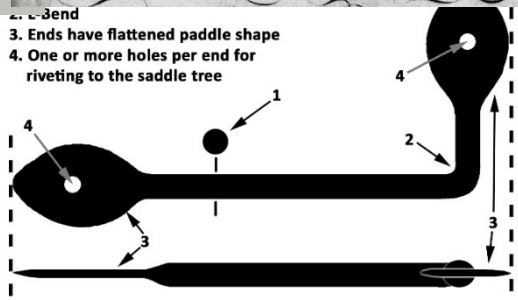


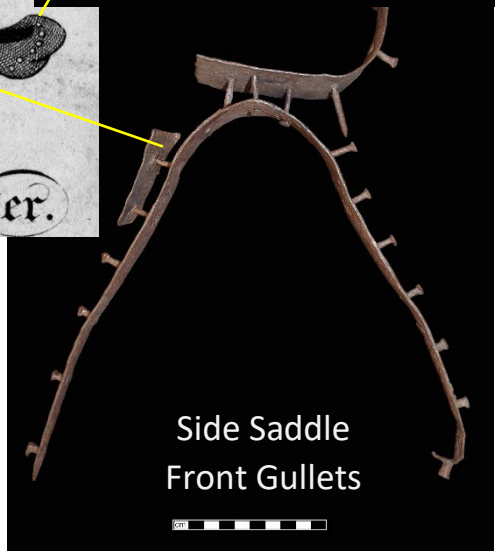
Rear
Gullet

Crupper
Loop

Stirrup Bar
Support
(3 Angles)

Stirrup Bar

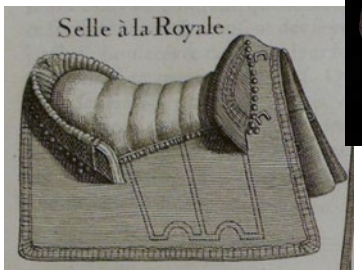


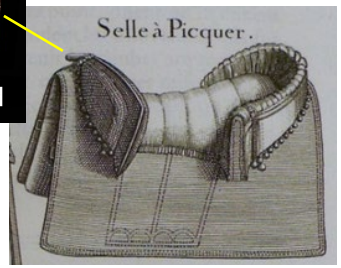


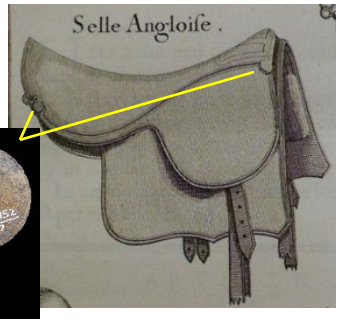
Side Saddle
Front Gullets

Saddle Part	Defining Characteristics	Function
Stirrup Bar 	• L-shaped overall • Bar is circular in cross section • Ends are flattened and have rivet holes	• Riveted to the saddle tree to hold stirrup leathers
Stirrup Bar Support 	• Iron strap that is folded in half and rounded at the fold to fit a stirrup bar • Terminals are typically wider than the portion of the strap at the fold • Both terminals have rivet holes	• Supports the stirrup bar around the halfway point • keeps the stirrup leathers from sliding out of position.
Metal Pommel 	• Cast copper alloy • Distinctive hollow codpiece shape • Often has linear decoration • Tabs or “ears” with holes for attachment	• Primarily decorative • Introduced mid-17th century • Fell out of favor for most saddles by the 1730s • Later examples may indicate the use of training saddles
Saddletree Gullets 	• Thin iron strap with rivets at frequent intervals • Rivet length may vary from longer at the center to shorter at the ends, reflecting saddletree thickness; most rivets are <1” long • Often V-shaped with tapering arms; widest at the center bend • Contoured to sit against curved wooden arms (not flat like architectural hinges) • Often filed so that edges appear beveled. • Often sandwiched, with gullets from both sides of the saddletree connected by rivets • Rivets are circular in cross-section	• Strengthen the wooden saddletree while still allowing flexibility • May support additional hardware, such as a loop on the back for attaching a crupper (rear gullet only), or the stirrup bar (front gullet only)
Sivet 	• Looks like an iron buckle frame • Typically has no tongue • Attaches by means of a folded iron strap that rivets to the side arm of the saddletree • Typically a rectangular trapezoidal shape	• Hardware to hold saddle straps that are used to attach the girth
“English nail” 	• Button-like hardware, usually copper alloy, that is used at the four quarters of English saddles • Back has an attachment for a square iron nail shaft	• Decorative • Offers some reinforcement for saddle upholstery • Diagnostic of English saddles

Saddle Types







Saddle Type	Characteristics	Uses	Temporal Notes
Royal saddle	Bolsters on front and back, relatively low (about 2.5” tall)	Military, countryside riding	Metal pommel falls out of favor by 1730 for safety reasons
“Piquer” Saddle	Bolsters front and back, relatively high (about 4” tall)	Riding and training young horses; high bolsters to help keep the rider seated, hold thighs more firmly	
English saddle	No bolsters, lightest option	Hunting at first, then general riding for everyday use and dressage	In use by the late 17th century; dominant by ca. 1730
“Shaved” saddle	Hybrid of royal saddle and English saddle; Low bolster (about 2”) in front only	Hunting	
Pack saddle	Forms vary, but largely wood with iron fittings and hooks	Cargo	
Chair side saddle	Exactly as is sounds, the saddle is shaped like a chair and faces the side, with a footrest like a step hanging down.	Primarily for women, but could also be for inexperienced riders, or anyone who just wants to be a passenger. The rider in this saddle is not controlling the horse.	Predates settlement of the English tobacco colonies, but continued in use
Side saddle	Saddle where the rider faces front, with one knee pulled up but both feet on the same side	Ladies’ riding	Form with second ‘hook’ introduced in the 19th century
Postillion saddle	Variation of the English saddle	Driving; the postillion driver rides one of the horses pulling the vehicle, unlike a coachman who drives horses while seated on the vehicle	
Harness saddle	A narrow saddle to support the weight of vehicle shafts or poles; often with rein guides or terrets; no seat	Driving	Atypical in the tobacco colonies prior to c. 1750, except in high-class households near urban centers such as Williamsburg, VA

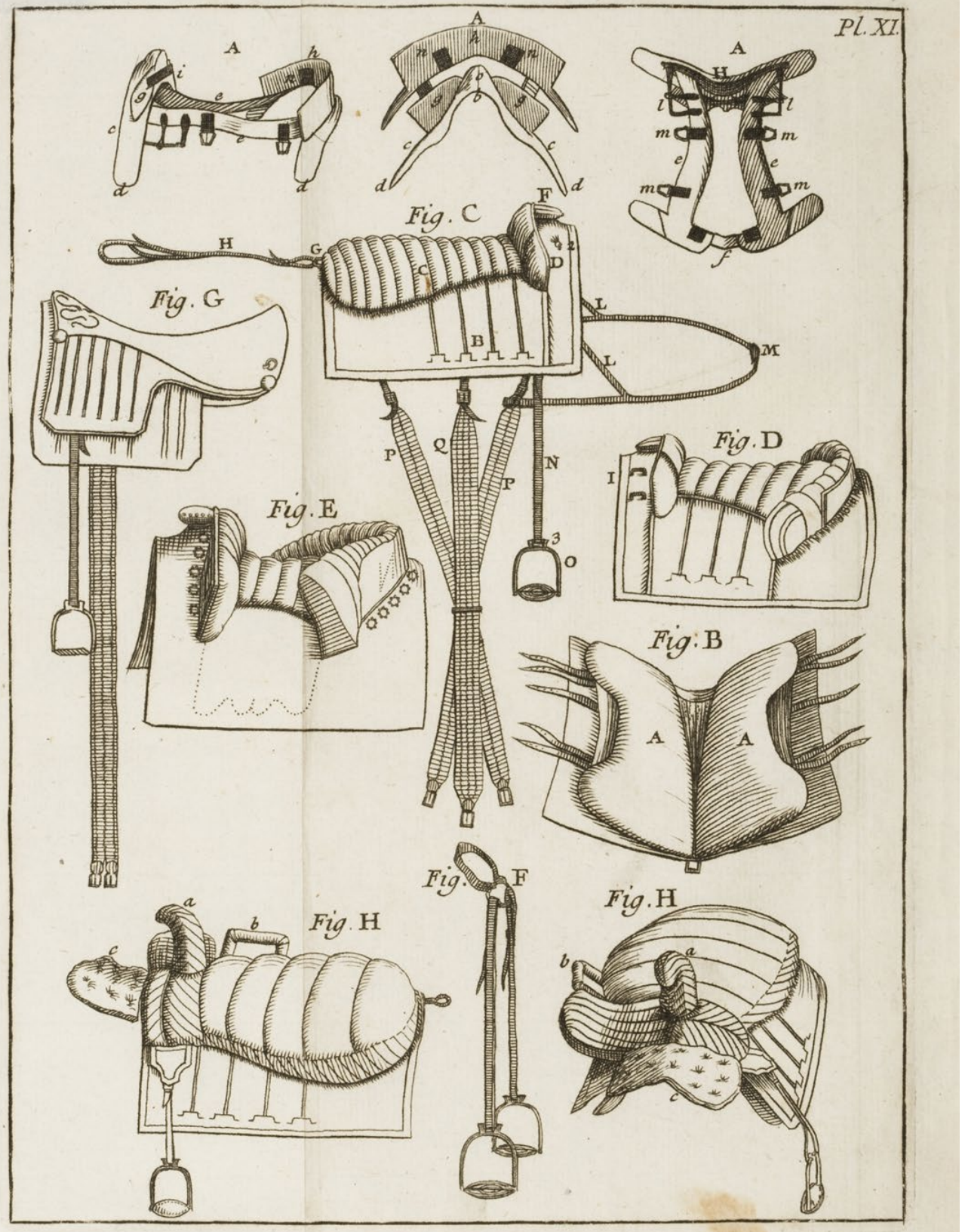
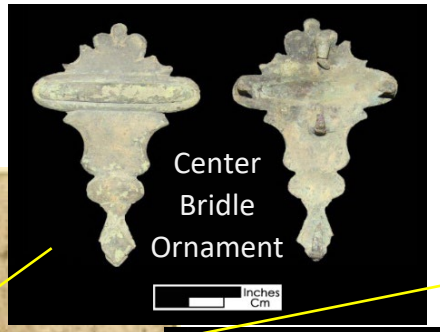
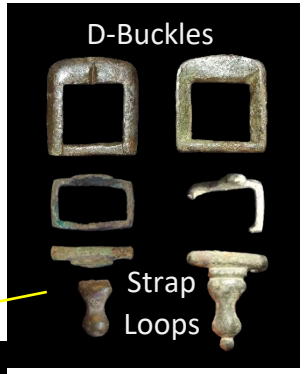
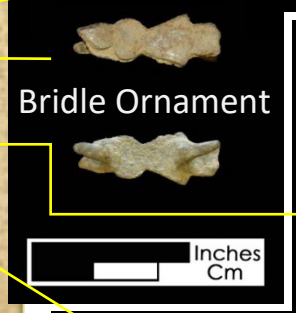


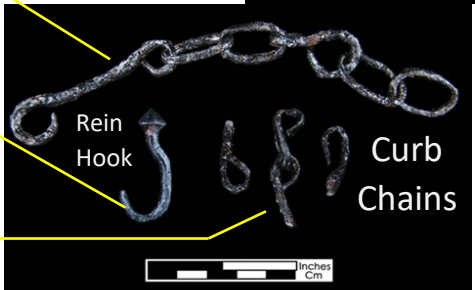
Fig. C
Fig. G
Fig. D
Fig. E
Fig. B
Fig. F
Fig. H
Fig. H

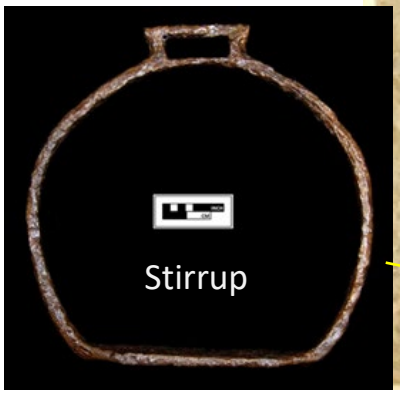
Horse Tack ca. 1680-1750

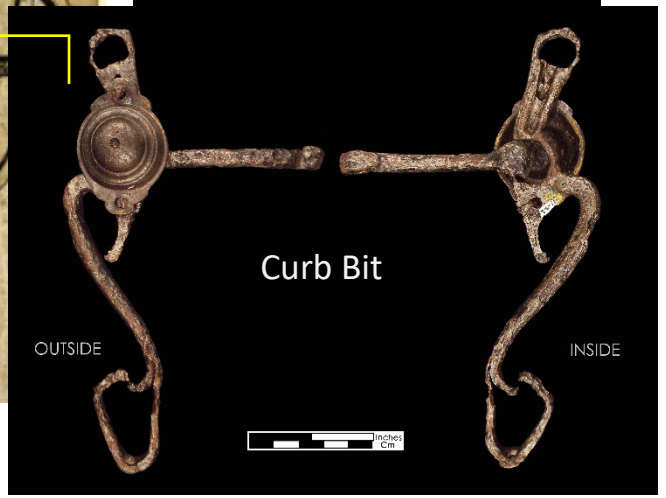








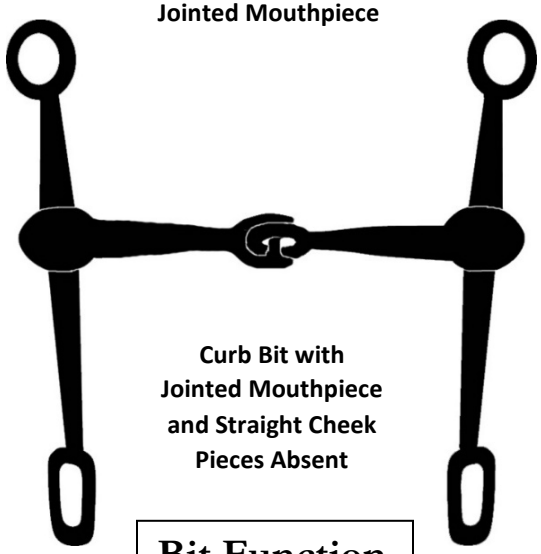




Select Bridle Bits from the Colonial Period

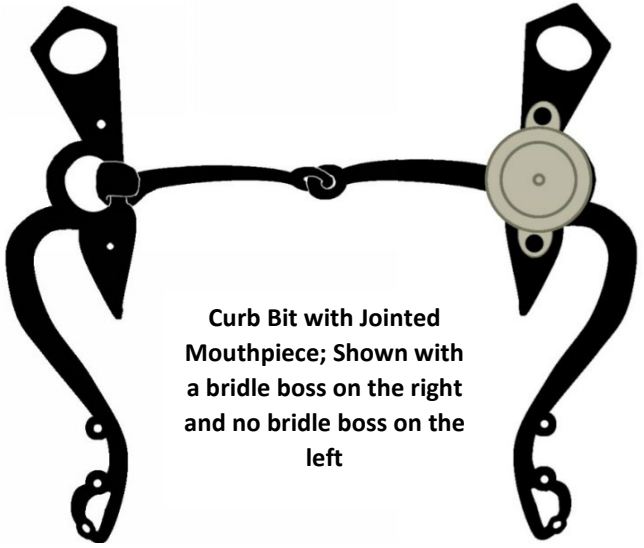
Bridoon with Solid Mouthpiece

Bridoon with Jointed Mouthpiece



Curb Bit with Jointed Mouthpiece and Straight Cheek Pieces Absent

Snaffle or Watering Bit with Jointed Mouthpiece



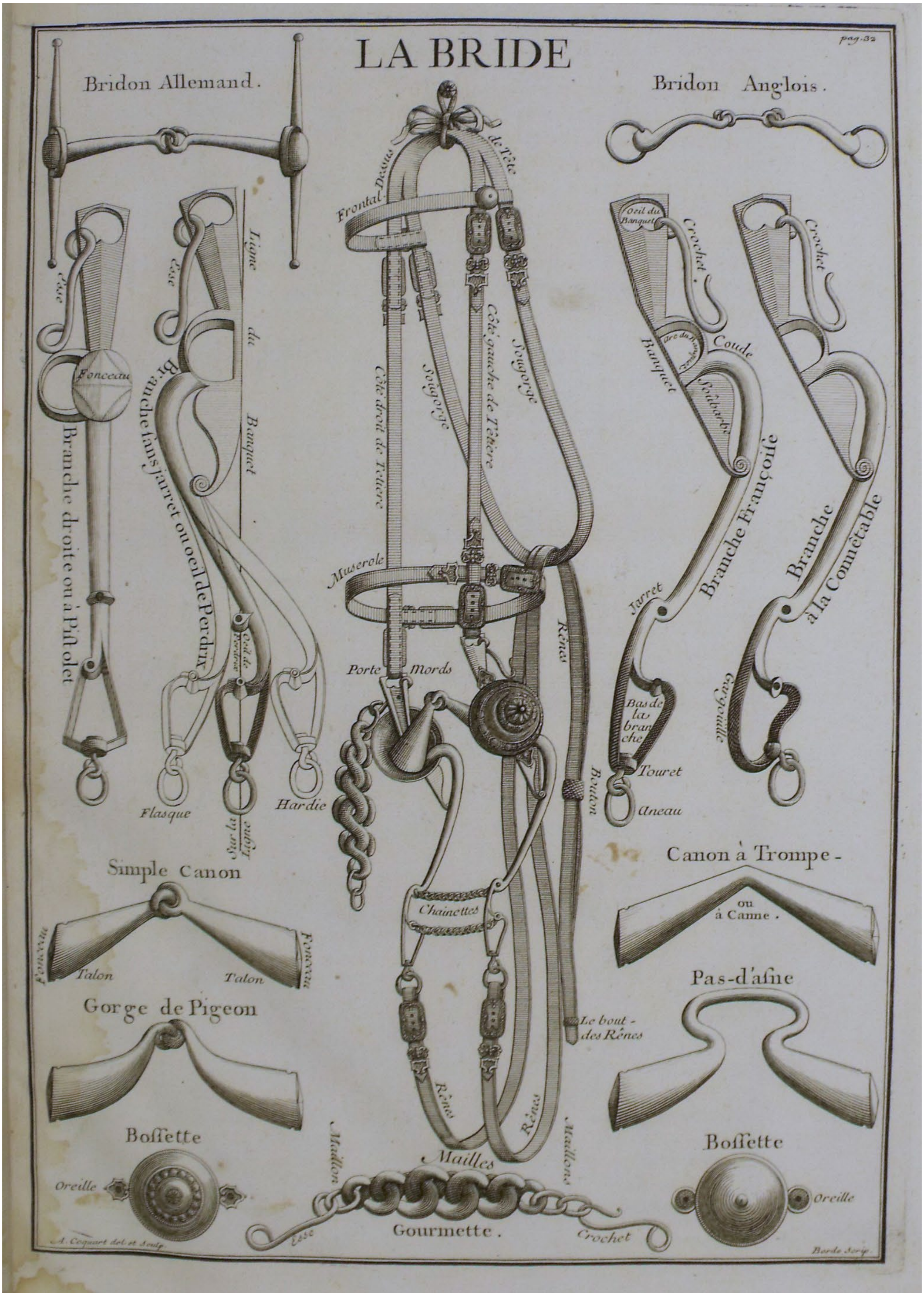
Curb Bit with Jointed Mouthpiece; Shown with a bridle boss on the right and no bridle boss on the left

Bridle Bits & Bosses

We typically find three kinds of bits archaeologically: curb, snaffle, and bridoon (see the diagram). Bridoons and snaffles have the reins attached right at the intersection with the horse's mouth. Curb bits are leverage bits that hang down from the horse's mouth and connect underneath with chains. Reins attach to curb bits at the bottom, so that when pulled, the reigns pull the bit up so that the chains contact the horse's chin area. If desired, riders could equip a horse with both a snaffle and a curb at the same time by just stacking both in the horse's mouth. Eventually the Pelham bit was invented to accomplish the same thing; it's like a curb bit with an extra ring where a snaffle would have one; two sets of reins can attach to one Pelham bit at different places.

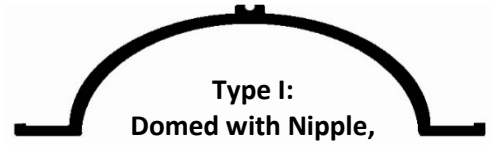
Bit Function

People who ride today typically have preferences about the right bit for the right kind of riding or driving/vehicle pulling, as did people in the past. As I understand it though, much has to do with the personality of the horse or mule, the skill of the rider/driver, and what kind of equipment was available, so there are no universal rules like "curb bits are for hunting" and "snaffles are for driving." Those kinds of generalizations don't really apply. Even once bits were marketed for specific things (hunting, racing, etc.), that doesn't mean that's the only thing people used those bits for.

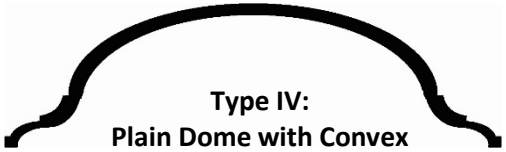

LA BRIDE
pag. 32
Bridon Allemand.
Bridon Anglois.
Esse
Esse
Ligne du Banquet
Fonceau
Branche droite ou à Pistolet
Branche sans jarret ou oeil de Perdrix
Oeil de Perdrix
Flasque
Sur la Ligne
Hardie
Dessus de Tête
Frontal
Côté droit de Tetiere
Sougorge
Côté gauche de Têtiere
Sougorge
Muserole
Porte Mords
Rênes
Bouton
Chainettes
Le bout des Rênes
Rênes
Rênes
Oeil du Banquet
Crochet
Arc du Banquet
Coude
Banquet
Soûbarbe
Branche Françoise
Jarret
Bas de la branche
Touret
Aneau
Crochet
Branche à la Connétable
Gargoüille
Simple Canon
Fonceau
Talon
Talon
Fonceau
Canon à Trompe -
ou à Canne.
Gorge de Pigeon
Pas-d'asne
Bossette
Oreille
Maillon
Mailles
Maillons
Esse
Gourmette.
Crochet
Bossette
Oreille
A. Coquart del. et Sculp.
Barde Scrip.

Bridle bosses are riveted to curb bits where the mouthpiece connects to the cheek pieces. They tend to be made of cast copper alloy, and they vary over time. Molded and openwork decoration tends to date from the 17th century to ca. 1720. Plain dome shapes replaced these in the 18th century. Plain dome bosses with a center nipple are found in both the 17th and 18th century. Bridle bosses have two tabs to hold rivets; not to be mistaken with bed bolt covers, which typically have only one rivet tab. Bridle bosses are on the diagnostic artifacts website at: http://www.jefpat.org/diagnostic/SmallFinds/BridleBosses/index-bridlebosses.html

Cross-Section Types for Domed Bridle Bosses from Diagnostic artifacts in Maryland

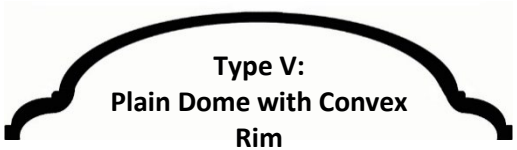


Type I:
Domed with Nipple,
Flat Rim



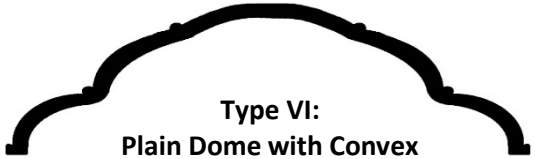
Type IV:
Plain Dome with Convex
Rim and Concave Transition
to Dome

Type II:
Domed with Nipple,
Convex Rim



Type V:
Plain Dome with Convex
Rim

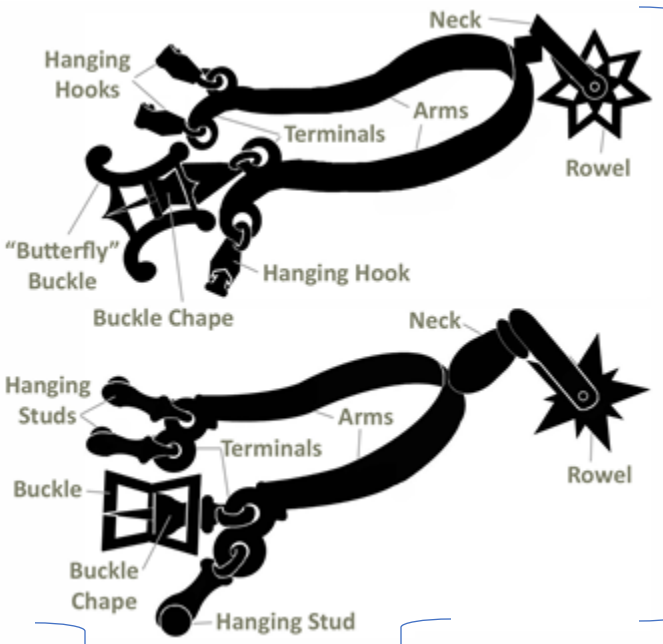
Type III:
Domed with Nipple, Convex



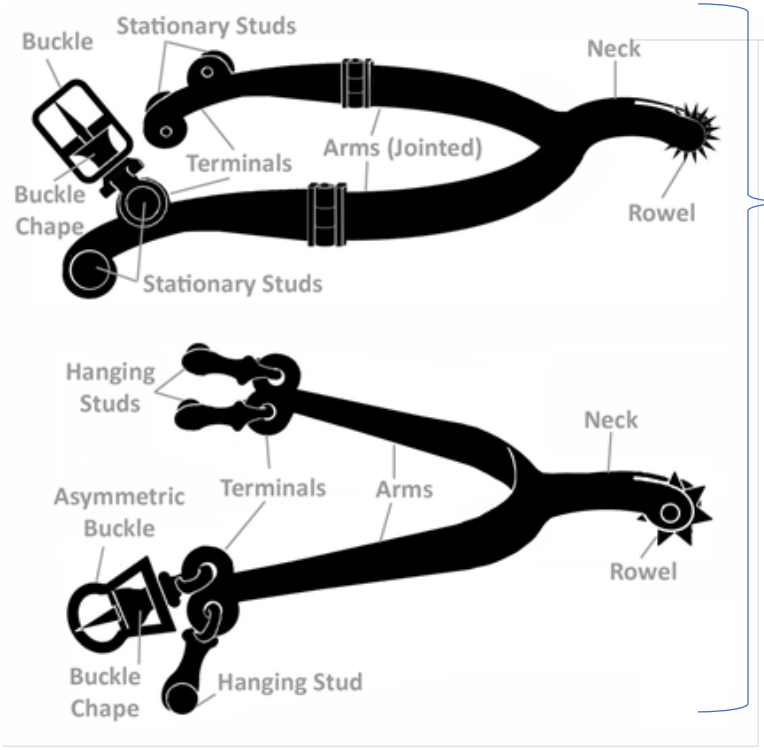
Type VI:
Plain Dome with Convex

Spur Diagrams

For more detail see table on the following page and the 2011 article in the Northeast Historical Archaeology, "A Guide to Spurs of Maryland and Delaware ca. 1635-1820" by Sara Rivers-Cofield: http://digitalcommons.buffalostate.edu/cgi/viewcontent.cgi?article=1254&context=neha

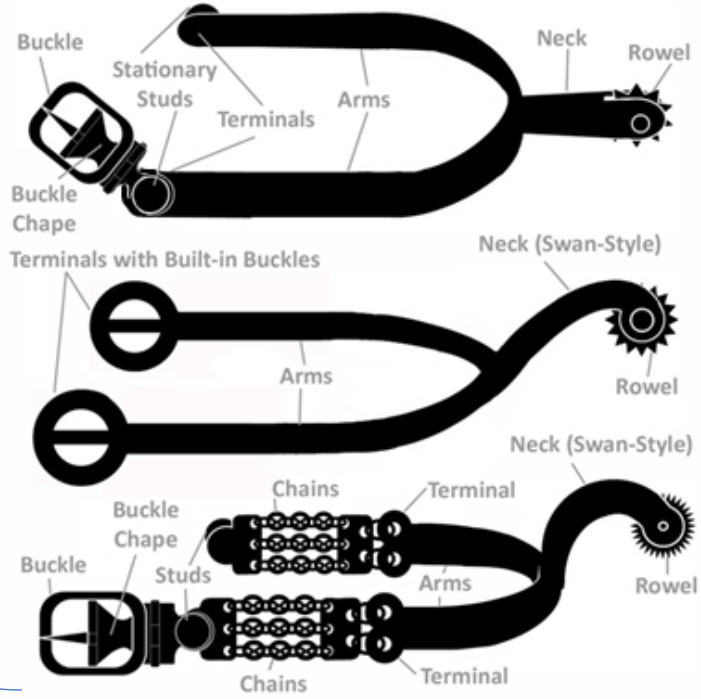


ca. 1620-1660

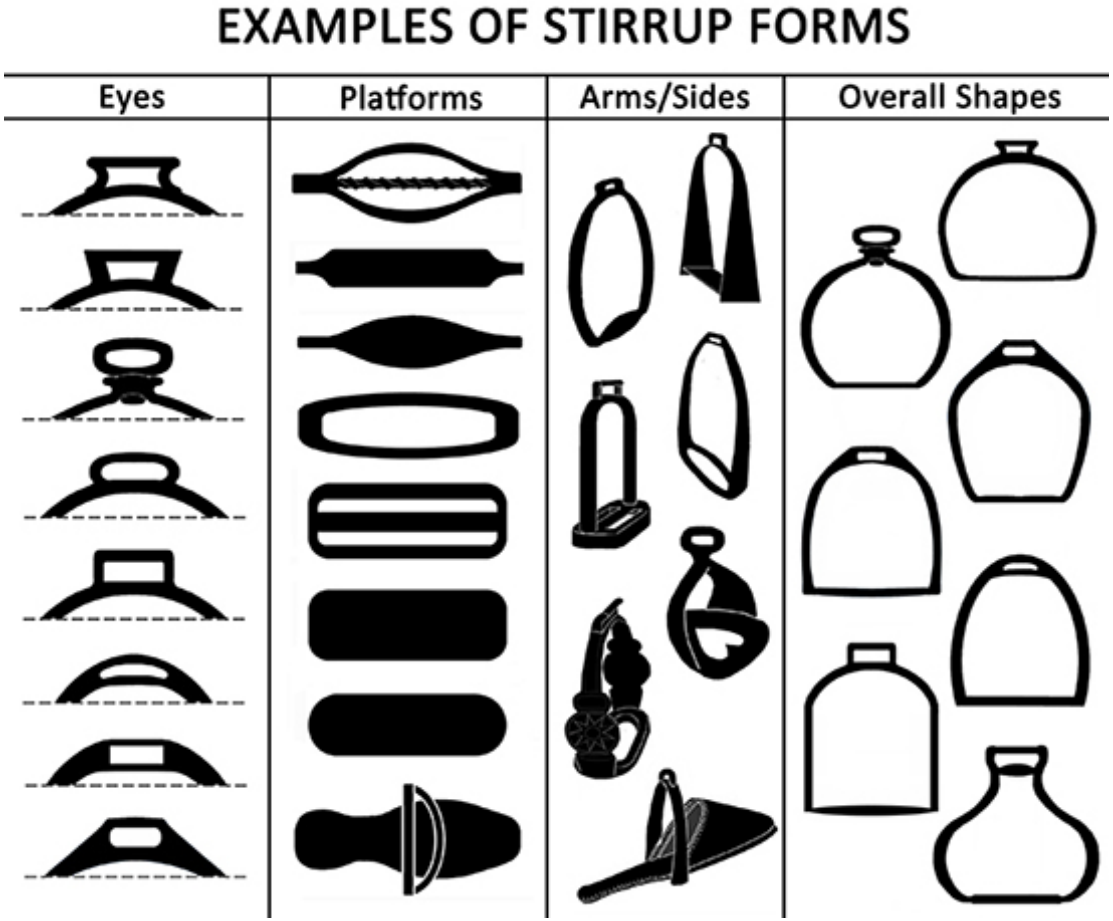


ca. 1650-1775

ca. 1765-1820



Typical English Spur Styles ca. 1600-1820			
	ca. 1600-1660	**ca. 1650-1775**	**ca. 1765-1820**
FUNCTION	• Riding/traveling • Boots and spurs popular for daily wear and walking	• Riding/traveling only	• Riding/traveling • Boots popular for walking/daily wear, though not always with spurs
ROWEL	• Often over 1" diameter • Sometimes ornate • Brass or iron	• Less than 1" diameter • Usually iron	• Very small, sometimes barely protruding from the end of the neck • Usually iron
NECK	• Relatively long; over 1" in length • Bent or curved downward, often at a 90° angle	• 1" or less in length • Curved slightly downward • Often flared at the end	• Length varies • Straight neck • Swan shaped neck begins (curves up, then down) • Flared end less common
ARMS/SIDES	• Usually curved • Sometimes triangular in cross-section • Slight taper from neck to terminal	• Straight • Slight or significant taper from neck to terminal • Sometimes hinged with little taper from neck to terminal	• Straight • Minimal tapering from neck to terminal • May incorporate chains between the terminal and stud/buckle
TERMINALS	• Off-set figure-eight with two holes • S-shaped with two holes	• Centered figure-eight with two holes • S-shaped with two holes • S-shaped with stationary studs	• A single stationary stud • A stud and buckle connected by brackets and/or chains • Openings for straps to pass through
STUDS/ HOOKS	• Looped around holes at the spur terminal; hang and swing freely	• Looped around holes at the spur terminal; hang and swing freely • Stationary studs attached directly to terminal holes	• A single stationary stud at each terminal • None: Straps attach directly to the spur terminal or the spur attaches to the boot without straps at all
BUCKLES	• Butterfly-shape is popular for spurs of this period, but plain asymmetrical and symmetrical buckles are also present • Looped chape to attach to the spur terminal	• Both asymmetrical and symmetrical buckles used • Looped chape to attach to the spur terminal • Hinged chape with an attachment for a stationary stud • Unhinged chape with a large hole for a stationary stud	• Hinged chape with an attachment for a stationary stud • Buckle attaches to spur straps that pass through openings in the terminal, not the spur itself
DECORATION	• Decoration preferred • Jingles possible	• Usually undecorated	• Usually undecorated

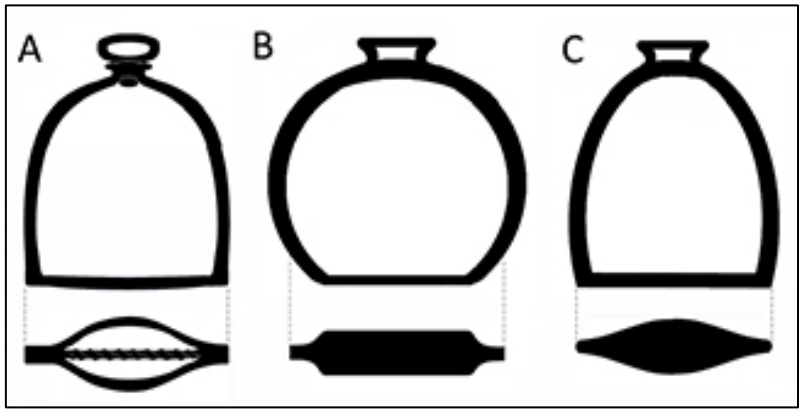


Stirrups

There are many different kinds of stirrups, but collections in the mid-Atlantic region tend to have only basic stirrup forms made in the English riding tradition. These are made of iron or brass, and they have three main parts: an eye for stirrup leathers or straps that attach the stirrup to the saddle, a platform or base to place the foot on, and arms to connect the eye to the base. All three parts may vary in terms of shape and decoration. Some of the shapes are shown at left.

Chronology

Very little literature exists on changes in stirrups overtime. (Noël Hume 1969:242-243) describes the earliest styles in the colonies as having straight sides, a gridiron (barred) platform, and a swiveling eye (A). He says this style was replaced in the later 17th century with stirrups that had solid rectangular platforms, a fixed rectangular eye that flared at the top, and curved sides that gave the stirrup a circular shape (B). He suggests that by the end of the 18th century stirrups had less curvature to the sides, and oval platforms rather than rectangular ones (C). Although forms matching these descriptions have been recovered in Maryland, there are not enough examples to do a seriation study that would test Noel Hume's chronology of colonial stirrups.



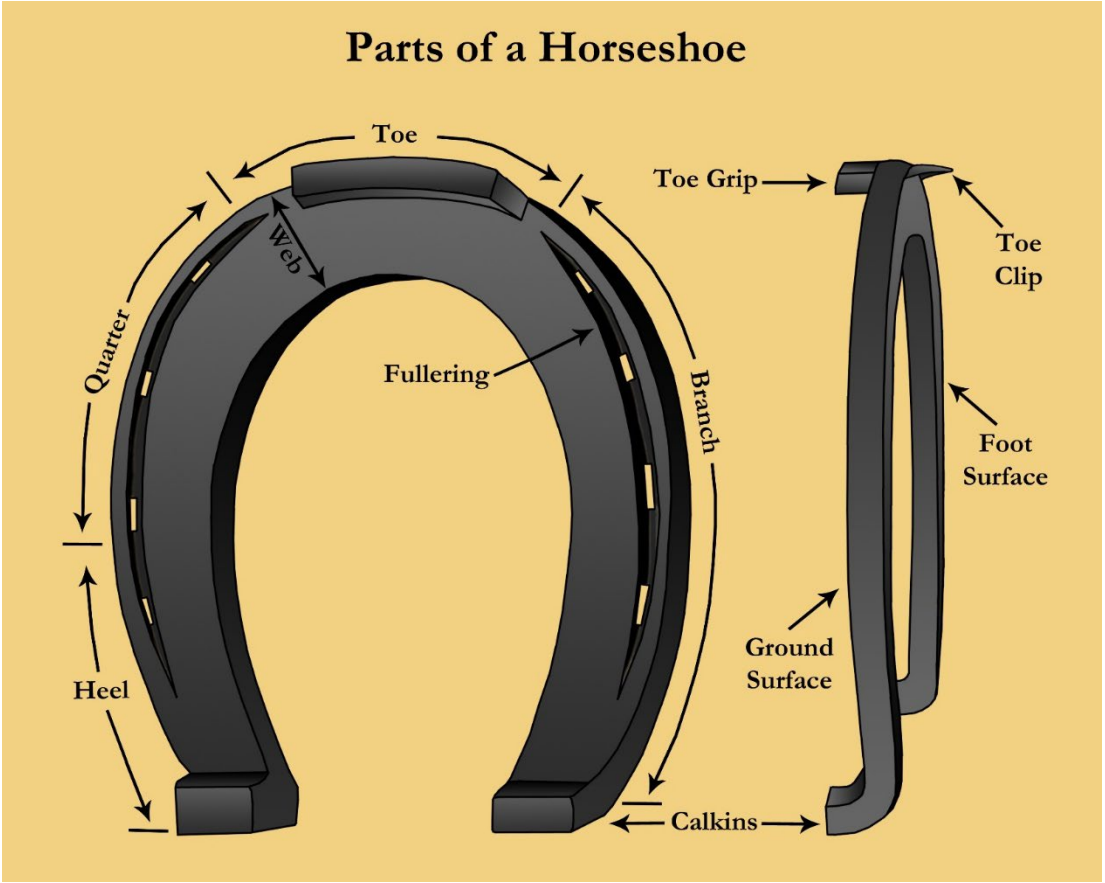
Forms described by Noël Hume (1969:242-243) as having temporal significance: A) early-mid 17th century, B) late 17th century to 18th century, C) appeared by the end of the 18th century. Figure by Sara Rivers Cofield.

For more info see the section on Diagnostic Artifacts in Maryland at http://www.jefpat.org/diagnostic/SmallFinds/Stirrups/index-stirrups.html

Horseshoes

- Toe grips and calkins point toward the ground; these are not present on all horseshoes.
- Toe clips point up at the horse and post-date 1850 (Chappell 1973; Noël Hume 1969).
- From the 17th century to 19th century there is a trend from a wider web to a narrower web. At the same time, horseshoe thickness increases gradually (be careful not to mistake wear for thinness though).
- 18th Century horseshoes tend to have relatively wide branches, with a little bump in near the heels, making an opening that's shaped like a keyhole (Chappell 1973).

18th-century horseshoe with "keyhole" opening.



Horseshoe Function: Not all horseshoes are necessarily about horses; many are about luck and protection from witchcraft. For example, shod horses weren't necessary in the Chesapeake until roads were paved because of the soft clay soils, but horseshoes were used before c. 1750 to protect openings in homes from the intrusion of witches. Here are some generalizations that may help determine function:

Horse-Related

- Broken shoes
- Found in fields, along roads, or near mills and other industries using horsepower
- Found in or near smithies
- Associated with other equestrian equipment

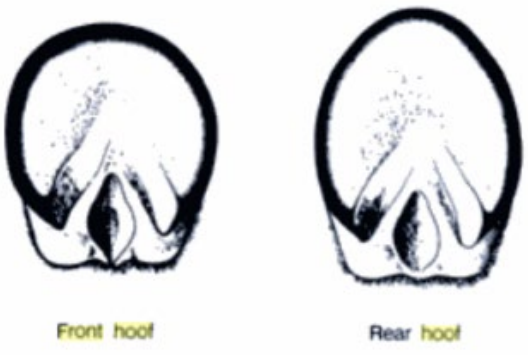
Apotropaic/Lucky

- "Found" shoes with some wear
- Whole (and nails present is a plus)
- Around house/outbuilding openings; windows, doors, fireplaces
- Associated with other apotropaic devices (witch bottles, concealed shoes, etc.)

Mule shoes: These have a narrow, elongated shape when compared to horseshoes, which are more circular/oval shaped overall. Look for parallel branches.

Ox shoes: Oxen have a bifurcated hoof, so ox shoes look like half a horseshoe, but with a wider platform at one end of the branch. Don't mistake these with horseshoes that break at the front, indicating that they were heavily worn and used until they broke.

We only have one ox shoe in the MAC Lab's collections that we know of, though oxen were used. I suspect that oxen were typically only used in the fields and didn't need shoeing in our area because of clay soils. Other areas like New England are more likely to yield these.



Typical shapes of front and rear hooves of modern horse (after Hickman & Humphrey 1988, fig 2.35)

From The Medieval Horse and Its Equipment, C.1150-c.1450, By John Clark, 1995

Horseshoe Shape: You can sometimes tell if a horseshoe is for a front or rear hoof by the shape. Front hooves are rounded, rear hooves have a slight point.

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Chappell, Edward

1973 A Study of Horseshoes in the Department of Archaeology, Colonial Williamsburg. In *Five Artifact Studies*, edited by Audrey Noël Hume, Merry Abbitt, Robert McNutty, Isabel Davies, and Edward Chappell. pp. 100-116. Colonial Williamsburg Foundation: Williamsburg, VA.

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1969 *A Guide to Artifacts of Colonial America*. University of Pennsylvania Press: Philadelphia.

Rivers Cofield, Sara

2021 Ho-Hum Hoofwear or Meaningfully Magical? How to Identify and Interpret Apotropaic Horseshoes. Paper prepared for the 2021 virtual Society for Historical Archaeology Conference.

Upholstery/Furniture Tacks

- Used for items that have a wood base
- Used for upholstered or leather covered furniture or for decoration
    - Chairs/sofas
    - Trunks/Chests
    - Jewelry/document boxes (coffers/caskets, etc.)
    - Coffins
    - Saddles
    - Coaches/sedan chairs
    - Spelling out initials and dates on such items
- May hold upholstery/leather in place or act as a decorative cover over iron tacks/nails serving that purpose
- In use from colonization (Eastern US) to present
- Can appear in many shapes and sizes, even on the same item
- Can be domed or flat
- Most common is a plain dome about 1 cm in diameter

Identification of tacks:

Pre-Industrial

- Cast
- Usually copper alloy
- Sometimes have a tin wash
- Look for **single** copper alloy tine on the back
    - Tine is square in cross section, tapering to a point

Industrial-era

- Machine stamping comes into use (after c. 1760)
- May be strings of multiple tacks attached to give a similar appearance, with tines intermittently
- May be copper alloy or iron with plating of some kind
- Look for thinner metal in general, more prone to dents

Helpful Sources:

Fennimore, Donald L.
1996 *Metalwork in Early America: Copper and its Alloys from the Winterthur Collection*. A Winterthur book distributed by the Antique Collector's Club: Winterthur, Delaware.

Birmingham Trade Catalogs:
http://contentdm.winterthur.org/digital/collection/TradeCats/search

Historic Terms: Chair nails, coach nails, coffin nails, trunk nails

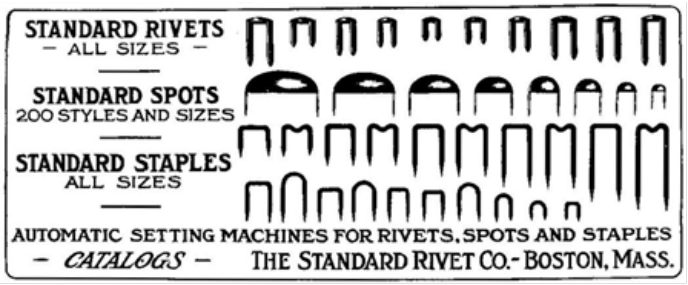
Leather Ornaments

- Used on straps
- Typically for horse bridles and harness decoration after 1650 (as opposed to things people wore)
- May help secure multiple layers of leather, but typically purely decorative
- In use from colonization (Eastern US) to present, but for different activities
    - Use on saddle horses: 17th-18th century
    - Use on harnessed horses for vehicles: mid-18th-19th century
    - Use on heavy harness draft horses: 19th century
- Can appear in many shapes and sizes, even on the same item
- Can be flat or raised
- Shapes do show seriation trends

Identification of leather ornaments:

Pre-Industrial

- Cast
- Copper alloy
- Sometimes have a tin wash
- Look for **multiple** copper alloy tines on the back
    - Tines are oblong or ovoid in cross section, tapering to a dulled point
    - Measurement of the space between bent tines and the ornament back offers insight on leather thickness



The September 1919 *Harness Gazette* featured this ad for The Standard Rivet Co. which offers "200 styles and sizes" of multi-tined "spots" that look much like many of the plain domed leather ornaments found on Maryland sites.

Industrial-era

- Same tacks available wholesale in single or multiple tines from brass founders by the end of the 18th century (furniture tack forms and ornament forms could overlap more)
- Machine stamping comes into use
- May be copper alloy or iron with plating of some kind
- Look for thinner metal in general
- By the turn of the 20th century, plain domes known as "spots" were machine-made with integrated teeth at the edges in lieu of tines

References:

Rivers-Cofield, Sara 2008 A Preliminary Study of 17th- and 18th-Century Leather Ornaments from Maryland, *Maryland Archeology*, Volume 44(2):12-27.

Diagnostic Artifacts in Maryland: http://www.jefpat.org/Documents/Rivers%20Cofield%20Article.pdf

Buckles

Differentiating between equestrian and personal adornment buckles is not a matter of copper alloy and pewter versus iron:

- Front-facing buckles for 17th-18th century saddle horse bridles, breast straps, and reins are likely to be copper alloy.
- Hidden buckles for girths and iron frames attached to saddles, such as sivets and crupper loops, are iron.
- Harness buckles for vehicles can go either way. Some are copper alloy and highly decorative for coaches and other fine vehicles; others are likely to be plain functional iron, even if they are in full view.

Copper Alloy

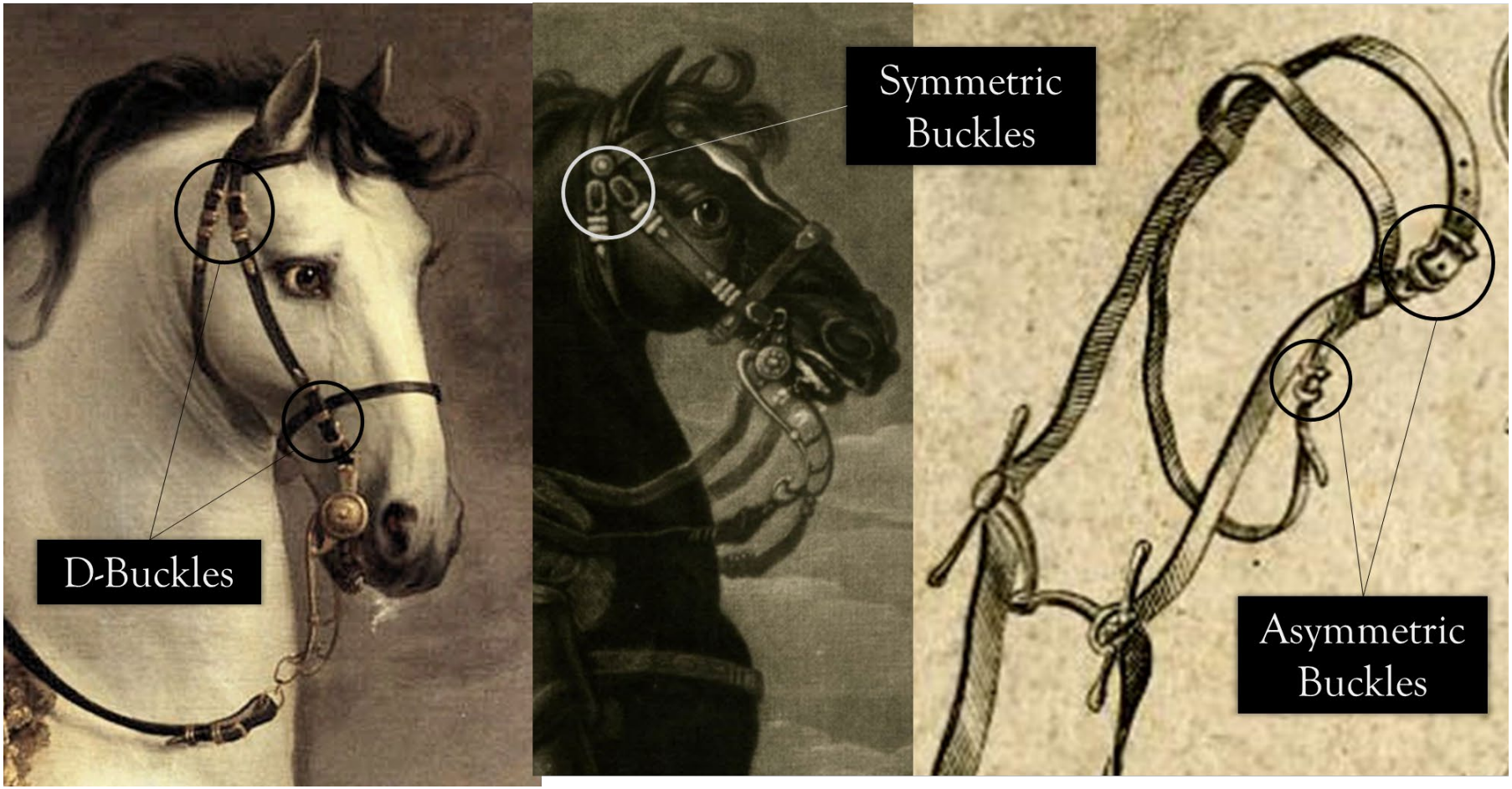
- Bridles could have up to 10 matching buckles, so copper alloy buckles that appear in multiples are more likely to be for bridles
- Cast in one piece
- Single or double opening
- Symmetric or asymmetric
- Generally lay flat or bend so that the axis is lower than the ends to allow for strong straps to pass through
- Typically have no finish work to remove casting defects on the back; they would have been assembled by saddlers, so the backs didn't need finishing to appeal to consumers.
- Often have matching strap loops and/or leather ornaments; look for rose-molded buckles and rose ornaments co-occurring, or knobbed buckles and knobbed strap loops, etc.
- After c. 1750 in the mid-Atlantic there might be copper alloy buckles for vehicle harnesses harness. They are likely to be large and have recessed center bars to accommodate harness straps.

Single Sided/D-Buckles

Strap Loops

Asymmetric cast in one-piece

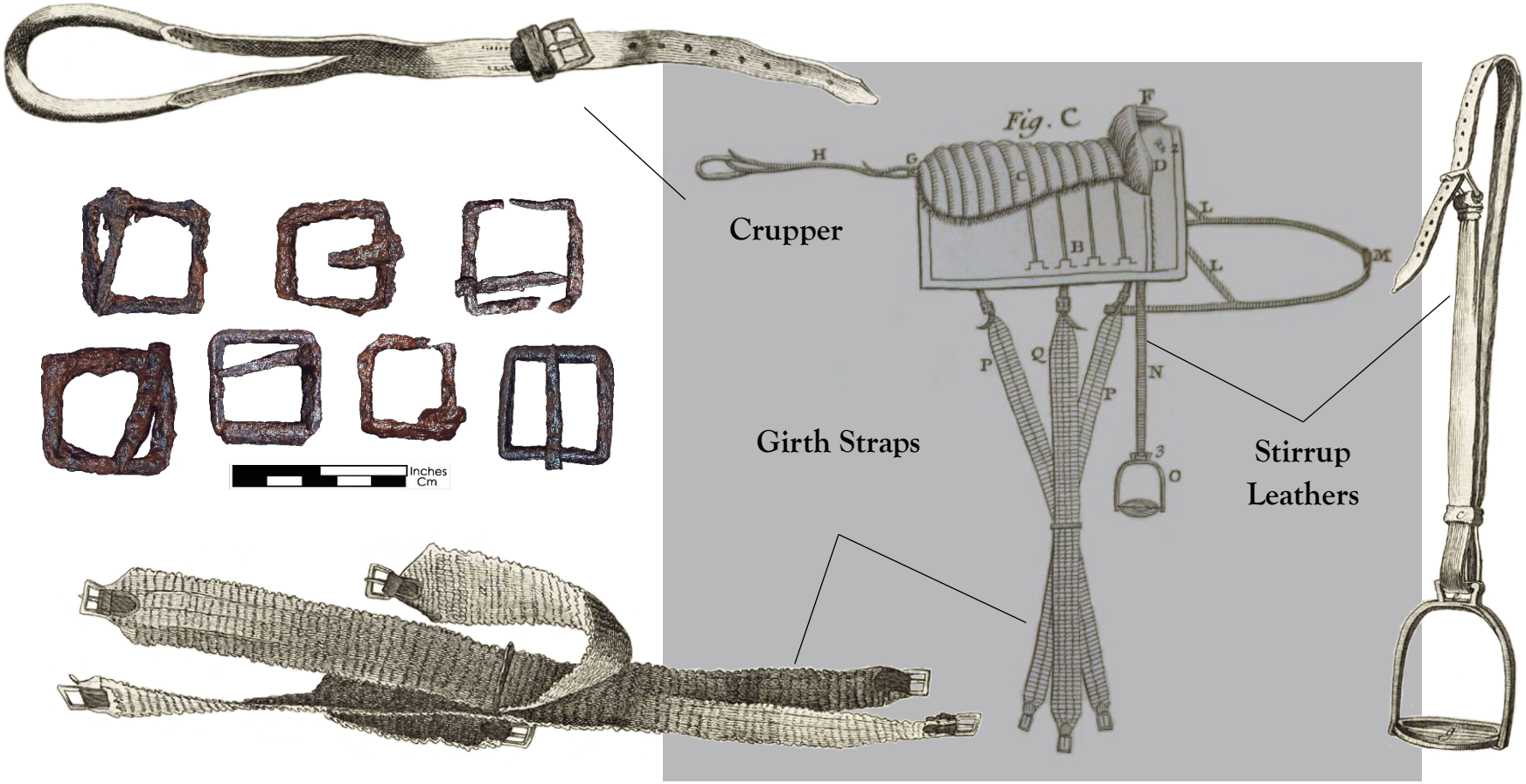
Symmetric cast in one-piece



Examples of flat buckles, cast in one piece with unfinished backs.

Iron Horse Tack Buckles

- Generally square or slightly trapezoidal
- One side of the frame serves as the pin axis
- Roller bars often present opposite the pin axis
- Often filed to be contoured or circular in cross section
- Pre-industrial buckles lay flat; later buckles may have more curvature
- Most are between 1” and 1.5”; major deviation from this size is likely to indicate placement either on harness for large buckles, or accessories like pistol holsters, baggage, etc. for smaller buckles



Links

For a presentation on differentiating horse buckles from personal adornment buckles, there is a video here:
https://www.youtube.com/watch?v=1cSUO303h9Y
For a presentation providing historical context for equestrian finds in the colonial Chesapeake, there is a video here:
https://www.facebook.com/watch/?ref=search&v=662807384630279&external_log_id=849836cd-0b2c-4c88-ae94-372ac7be9fac&q=jefferson%20patterson%20park%20%26%20museum

Diagnostic Artifacts in Maryland
Bridle Bosses: https://apps.jefpat.maryland.gov/diagnostic/SmallFinds/BridleBosses/index-bridlebosses.html
Leather Ornaments: https://apps.jefpat.maryland.gov/diagnostic/SmallFinds/LeatherOrnaments/index-leatherornaments.html
Spurs: https://apps.jefpat.maryland.gov/diagnostic/SmallFinds/Spurs/index-spurs.html
Stirrups: https://apps.jefpat.maryland.gov/diagnostic/SmallFinds/Stirrups/index-stirrups.html

Source Material

"La Selle" and "La Bride" Figures:
Gueriniere, François Robichon de la
1751 *Ecole de Cavalerie, Contenant la Connoissance L'Instruction, et la Conservation du Cheval.* Huart et Moreau Fils: Paris. Accessed in the Charles Lawrence Ferguson Collection, the library of the Society of the Cincinnati, Washington, DC.

"Pl. XI" Figure with saddle tree and saddles:
Garsault, François Alexandre de
1741 *Le nouveau parfait maréchal : ou, la connaissance génerale et universelle du cheval; divisé en sept traits*.. Chez Despilly: Paris, France. Bibliothèque Nationale de France, https://gallica.bnf.fr/ark:/12148/bpt6k108877x.image, accessed November 11, 2020.

James Robinson Trade Card:
The British Museum, Heal, 102-43 https://www.britishmuseum.org/collection/object/P_Heal-102-43

Unless otherwise specified, all other content by Sara Rivers Cofield for the grant from The Conservation Fund titled "Equestrian Artifacts of the Tobacco Colonies" to be added to the JPPM Diagnostic Artifacts website in 2022/2023.