

On the Construction of Shields

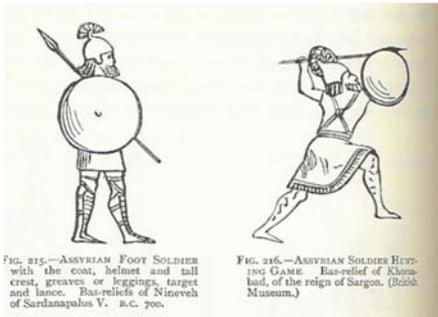
A Brief Historical Survey of Shields

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“Form Follows Function”

Assyrians

An early example of the round, center gripped shield.



Egyptians

An early example of the strapped round shield. Also note the unusually shaped war and tournament shields.

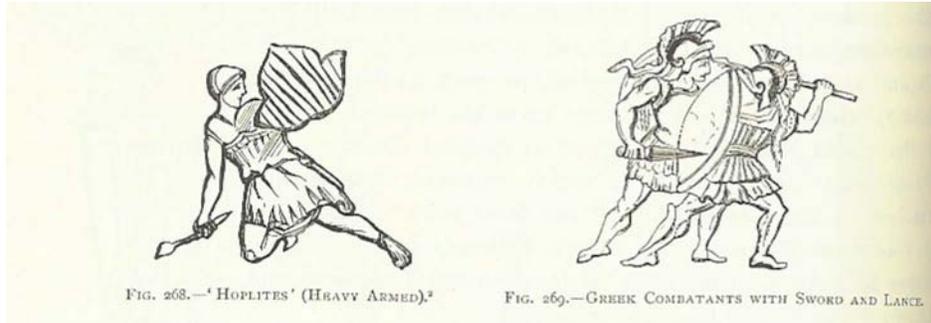


Illustrations on page 1 and 2 from **The Book of the Sword**, Richard F. Burton, Dover Publications, New York 1987, except where noted.

Greeks

“Aias came nearer, carrying like a tower his body shield of seven ox hides sheathed in bronze – a work done for him by the leather-master Tykhios in Hyle: Tykhios made the glittering shield of seven skins of ox hide and an eighth of plated bronze.”

-The Iliad



The shield, called a hoplon (from which is derived the name hoplite), had a wooden core faced with bronze and backed by leather. The armband and handgrip were also of bronze and the area where the arm rested had an additional layer of protection. Total weight of the shield was 18 lbs. A leather skirt could be hung from the shield to provide protection from missiles.

Persians

Shield is made of wicker covered with hides.



From John Warry, **Warfare in the Classical World**, Barnes and Noble, New York, 1993

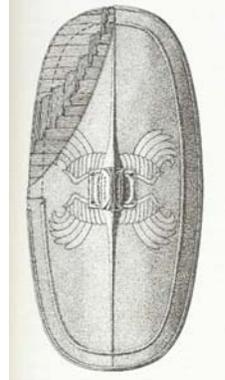
Indians

Shields are found in many cultures but are remarkable similar in style.

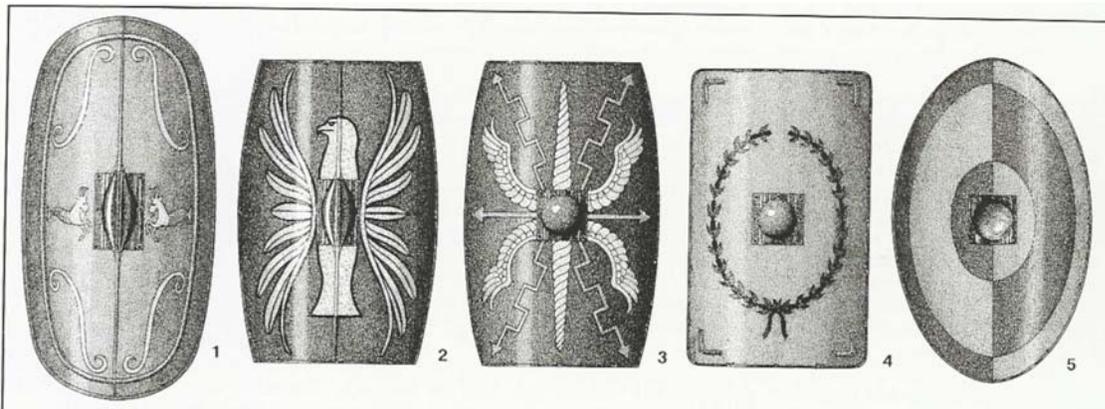


Romans

Polybius provides a description of the Scutum at the time of the Marian reforms: curved, 24 inches wide, 44 inches long, a half to three quarters of an inch thick. Construction was a double thickness of planks glued together (plywood), with an iron rim to protect against sword cuts, a center boss to deflect blows and a leather cover.



Note the change of design over time. Most modifications were intended to reduce the weight of the shield.

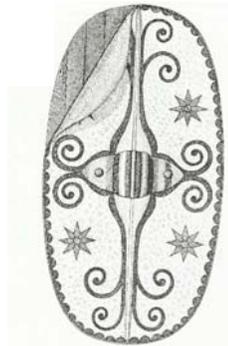


1. 7th Century BCE
2. c. 10 BCE
3. c. 20 CE
4. c. 40-50 CE
5. c. 150 CE

From John Warry, **Warfare in the Classical World**, Barnes and Noble, New York, 1993

Celts

Very similar to the Roman Scutum only flat instead of curved. Made of oak or linden wood about 1/2 inch thick and covered in hide.



From John Warry, **Warfare in the Classical World**, Barnes and Noble, New York, 1993



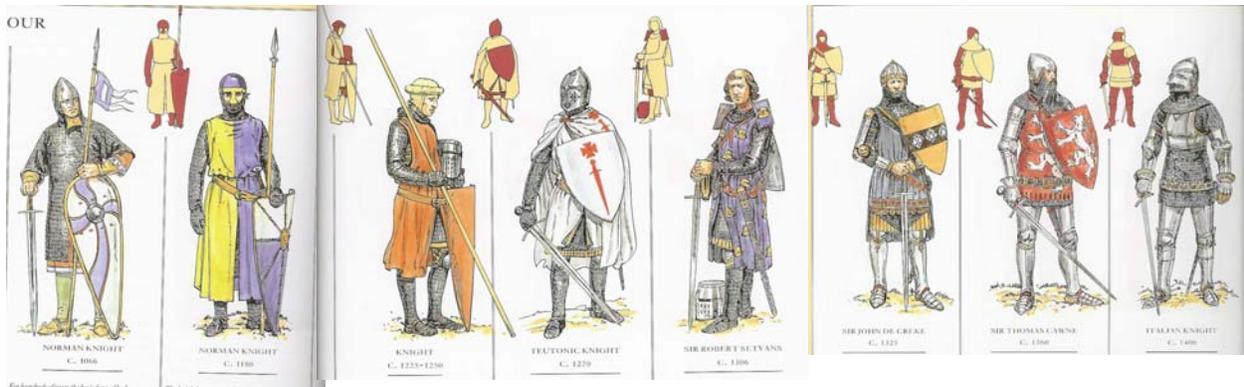
Anglo-Saxon Shield

Based on excavations: Consisted of overlapping wooden boards covered with leather or heavy cloth with an iron boss in the center. Some rimmed with bronze but most rimmed with leather. Center grip, sometimes reinforced with iron. Usually from 24"-28" in diameter, with continental versions being about 36". Thickness was from 2/16-1/2", with most being about 5/16". Most popular wood seems to have been alder, willow, and poplar. Continental finds all made of oak.

From Susan Margeson, **Vikings**, Alfred A. Knopf, New York 1994

Medieval Shield Development

Shields gradually diminish over time as armor improves.



From Andrea Hopkins, *Knights*, Barnes & Noble, New York, 1990

Typical shield was made from wood, covered with gesso and painted with a heraldic charge. Back covered with cloth. Weight 6-10 lbs. Cariadoc estimates average of 8lb 10 oz for a 24" round. Enarmes and guige made of leather.

Funerary Shield of Edward the Black Prince:

Mills, Dorothy and Sir James Mann. **Edward The Black Prince: A Short History and The Funeral Achievements**, J.A. Jennings LTD: Canterbury. 1975.



From David Edge & John Miles Paddock, **Arms & Armor of the Medieval Knight**, Crescent Books, New York 1998

The shield is made of poplar, covered with successive layers of white canvas, plaster, paper and leather. To the leather surfaces of the front are applied the quarterly charges of fleurs-de-lis and leopards, boldly modeled in leather in high relief, and affixed by small brads. Traces of gilding and of red colour on the tongues of the leopards can still be seen. The ground of the four squares is punched with a spotted diaper to enrich the effect. The cruciform punch marks have been ingeniously slanted at different angles in the quarters of France and England respectively to give variety. Curiously enough there is no trace of the label of cadency ever having been on the shield. The back of the shield is covered with canvas originally painted green or blue, of which faint trances remain. Any hand-straps (or "enarmes") which it may have had are gone, but holes show where they may have been fixed. The two loops near the top were probably placed there for attaching the shield above the tomb. The only other comparable English shield is that associated with the monument of King Henry V in Westminster Abbey. In this case the charges on the front have vanished completely, but the velvet pad at the back for the hand and wrist have survived.

Applicability to SCA Shields

Form follows function

Shields were light and supplemented armor

Average size is 24" round/ 24X36 heater

Width no more than 1/2"

Edging was generally leather

Padding behind enarmes