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FANTASIES IN STEEL

An Interactive Qualifying Project Report

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By:



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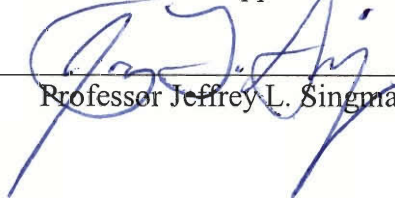
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Date: March 02, 2001

Approved:



Professor Jeffrey L. Singman, Advisor

Abstract

This project entitled "Fantasies in Steel" focuses on the processes used for the creation of a virtual exhibit for the John Woodman Higgins Armory Museum. This virtual exhibit allows visitors to view selected artifacts using the Internet and provides access to artifacts that are normally not on display. "Fantasies in Steel" focuses on unusual arms and armor from around the world that illustrate the interaction of practical and imaginative elements.

Acknowledgments

This project was made possible by Worcester Polytechnic Institute in conjunction with the John Woodman Higgins Armory Museum. We would like to thank all those who aided us in the creation of this virtual exhibit along with those mentioned below.

We would like to thank Professor Jeffrey Singman for allowing our group to be involved in this wonderful Interactive Qualifying Project. Working with him has been a wonderful and eye opening experience. Never in our lives would we have thought we would have an opportunity to go behind the scenes and see artifacts first hand. His guidance has been indispensable, and he has been generous with his time and patience.

Also we would like to thank William Macmillan. His assistance and his advice in how to handle the pieces and effectively photograph them added a highly professional quality to the exhibition.

We would also like to thank Mr. Walter J. Karcheski, Senior Curator of Arms and Armor, for taking time out of his busy schedule to assist us in the completion of the final project.

The entire staff at the Higgins Armory deserves our thanks for all their help.

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I. Introduction

The Interdisciplinary Qualifying Project called Fantasies in Steel studies unusual arms and armor from around the world that illustrate the interaction of practical and imaginative elements. The arms and armor featured in this exhibit are from the Higgins Armory collection. The virtual exhibition can be accessed via the Internet. Each artifact has a detailed description, and a picture. The thumbnail of the picture is also a link to other pictures of that artifact type. Over 355 pictures are available for viewing in the exhibit.

The virtual exhibit provides access to the collection for audiences that would not ordinarily be able to physically visit the Armory. It also allows people to see the some interesting pieces of the Higgins Armory collection that may not otherwise be on public display. It can also be used as reference aid for research.

Living in today's "technological information age" this virtual exhibit allows the Armory to keep up to date with current trends and take full advantages of all resources.

II. Procedure

The artifacts that were included in the virtual exhibit were chosen because of unusual or bizarre qualities. Take for example the *jamadhar* and the *patta*. To an individual familiar with different types of Western Weapons these artifacts may seem bizarre, but to a native of India these artifacts are not. These weapons reflect the Indian style of martial arts and Indian regional and cultural views. Indian culture is expressed in many ways in these weapons. Religious inscriptions, prayers, and popular artwork of the culture can be found on these weapons. Some parts of the weapon may have evolved from a more functional aspect, but the forms taken clearly reflect the Indian culture that produced them.

Another reason some objects were chosen was that they may have appeared to have more drawbacks than advantages. Also an artifact may have appeared more decorative than functional. Part of the work of this project was to find criteria to focus on objects that are truly bizarre and unusual, rather than just unfamiliar to Westerners. These criteria are based on the following categories:

Fantasy Types

Oversized

The oversized weapon category encompasses those weapons that are or appear to be too large to be used effectively. The physical design of such weapons may have dimensions or weight that is too much for a person to use in battle. An example of this is the two handed sword, which at first glance appears to be oversized because the blade can be anywhere between four to five feet. But in fact it was used in battle because it is relatively light. In contrast there are also versions of the two handed sword that is clearly too big to use.

Ornate/Ceremonial

Artifacts that are heavily decorated and or for purely for ceremonial use, fall in this category. Examples of this can be parade weapons, badges of rank, and weapons used for ritual sacrifices.

Advantages V. Disadvantages

Artifacts fall into this category when their physical structure “appears” to undermine their usefulness in the field, and yet appearances may not be true. An example of this would be the Patta. When the Patta is examined the gauntlet portion is found to restrict wrist movement. Later we are able to discovered its cutting thrusting power is improved and facilitated by the use of the powerful forearm muscles.

Wavy Blade

This category encompasses all wavy bladed weapons. An example is the Indonesian Kris Knife. The wavy blade of this Kris Knife represents the mythological snake the Naga. The more waves, the more rare and valuable the knife. This is due to the fact that chiefs and important figures owned blades with many waves.

Symbolic

Weapons that are modeled after some other object like an animal or demon are placed into this category. Take for example the Persian Parade Mace shaped like the head of a bull. This was to invoke the ferocity of the bull.

Inventive

This category covers weapons that were a strange invention, which may or may not work as intended. Take for example the Gun-Shield. This was an invention used by the bodyguards of King Henry VIII. Upon examination of this artifact it would only be effective for close range combat, since the length of the barrel would limit its accuracy to a few feet.

Literature Review

Many books have been written on the subject of arms and armor. For the purpose of this project the books have been grouped geographically. The three main groups are Europe, Asia, and World. The “world” books mostly focus on European arms and armor but have chapters devoted to Asian or African arms and armor.

The European books cover a wide range of weapons and armor. Some of them are *Arms and Armour and Base Metalwork* (1974) by Claude Blair, *An outline of Arms and Armour in England* (1966) by Sir James Mann, *Arms and Armor* (1964) by Vesey Norman, and *The Archaeology of Weapons* (1960) by R. Ewart Oakeshott.

For various reasons weapons from Eastern cultures will be the majority of the weapons selected. The books about these weapons tend to concentrate on a certain region.

The Higgins armory collection also has a large selection of Indian weapons. Two very informative books are *Indian Arms & Armour Volume II* (1980), and *Indian Arms and Armour Volume III* (1983) by G.N Pant. *The Indian Sword* (1968) by P. S Rawson is a book dedicated to daggers and swords. It is very thorough but some of the information conflicts with *Indian Arms & Armour Volume II*.

Other areas of interest include Japan and South East Asia. *Police Weapons – Japanese* (1963) by Ronald M Knutsen has some unusual illustrations of medieval Japanese catchpole type artifacts. Another book dealing with Japanese weaponry is *Japanese Arms and Armour* (1969) by Russell H. Robinson. The weaponry of Indonesia is very interesting because of the unusual styles of the hilt and blade. *Swords and Daggers of Indonesia* (1968) by Václav Šolic is also a good resource for finding information on these artifacts.

The books that have weapons from around the world are good starting points for finding information on a weapon. *Arms and Armor in the age of Chivalry* (1973) by Aldo G Cimarelli has pictures and short descriptions of all types of weapons from around the world. Another useful book is *Edged Weapons* (1970) by Frederick Wilkinson. It has many types of edged weapons including daggers, swords, axes, halberds, and spears from almost every region in the world. Museum catalogs are also good starting points. Two examples are *The Catalogue of Armour* (1928) by Stephen Grancsay and *Arms and Armor in the Art Institute of Chicago* (1995) by Walter J. Karcheski Jr.

Web Page Development

The web page was developed to be as easy to access and quick to load as possible. The page consists of several frame HTML pages. All of the elements of the web page are original and designed by the group. One page serves as the navigation bar, the other page consists of the heading and the title page, and the last page is where all the artifacts, pictures, and descriptions are shown.

The navigation bar was created to allow the user to move from one topic to the next. The user is able to access the different categories such as the geographical type and

the fantasy type. The user is also able to view a glossary of terms that identifies historical figures, dates, and unfamiliar terms. Also included in an appendix is the database that was used. This will allow the independent researcher to find artifacts and contribute information to the web site. Along with the database the photograph index will be available to view, and provide a resource for the independent researcher. Below are some screen shots of what the page looks like.

Fantasies in Steel

Home
World Map
Fantasy Type
Glossary
Appendix

This virtual exhibit looks at examples of arms and armor in the Higgins Armory Museum where the design owes as much to imaginative as practical considerations. Artifacts in the exhibit include various types of staff weapons and edged weapons, shields, and armor.

The exhibit was created by Dwaine Austin, Eric Laskey, and Frances-Feliz Zgambo, students at Worcester Polytechnic Institute, under the supervision of Professor J.L. Singman. This project is to fulfill the requirements of the Interdisciplinary Qualifying Project.

There are two options for navigating through the virtual exhibit: through a world map or by fantasy types. Each will take you to a list of artifacts, with links to pages on the artifact type. Clicking on the image on the artifact page will show you all the artifacts of this type in the Higgins collection.

[Welcome to Fantasies in Steel](#)

Fantasies in Steel

- Home
- World Map**
- Fantasy Type
- Glossary
- Appendix



Click on an area in the map to show a list of weapons from that area.

Not shown: Americas

Fantasies in Steel

- Home
- World Map
- Fantasy Type**
- Glossary
- Appendix

Fantasy Types

Oversized

The oversized weapon category encompasses those weapons that are or appear to be too large to be used effectively.

Ornate/Ceremonial

Artifacts that are heavily engraved or decorated that fall in this category.

Less Advantages than Disadvantages

Artifacts fall into this category when their physical structure appears to undermine its usefulness in the field, and yet appearances may not be true.

Wavy Blade

This category encompasses all wavy bladed weapons.

Symbolic

Weapons that are modeled after some other object like an animal or demon are placed into this category.

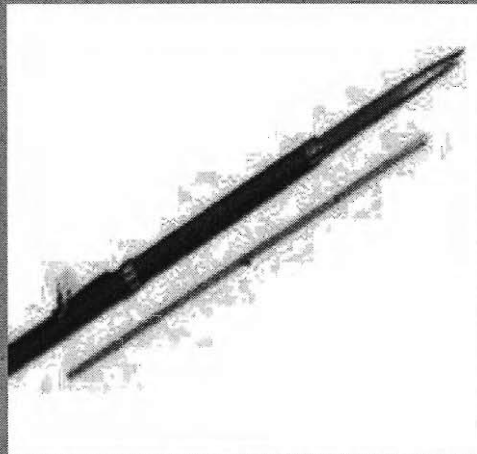
Inventive

Weapons that were a strange invention, which may or may not work as intended.

Fantasies in Steel

Home
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Appendix

Retractable Blade Pike (Joe Brown Pike)



Ref. Number: 2774

Origin: Confederate States of America, Georgia

Date: ca. 1862

Description: Staff Weapon; Retractable blade

The Retractable Blade Pike is one of the famous Joe Brown Pike models. The pike is made up of a spring catch retractable blade that slides into the shaft of the pike. The shaft of the weapon is oval shaped and hollowed out. The shaft is six feet and seven inches long and is made up of two separate pieces, held together by iron and brass bands. The top of the shaft is covered with a flat piece of iron with a slot allowing the blade to pass through; the bottom end is capped with a rounded iron butt piece.

The double edged blade is and made of steel. The fourteen-inch blade and its extension handle are lowered into the shaft by two springs. These springs were made of iron and were two feet long. When the lower spring catch was released the blade would slide out with such a force to easily impale any incoming enemy.

None of the weapons found to this day have the springs inside the pike. There

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Appendix A

African Throwing Knife

The simplest form of the African throwing sword is called the Hungamunga. This weapon is sickle shaped; other types of throwing knives have multiple projections. This weapon was a favorite of the tribes of Central Africa surrounding the Lake Chad region. It is often made of one piece of beaten metal, with a handle made of metal or wood. The blade can be decorated with ridges or dots.

The Hungamunga is a missile weapon used like a boomerang. Due to the variations among the different types and tribes, the first appearance of this weapon is hard to date. Often on the weapon there are many hooks and sharp edges added. Peter Connolly notes that the reasoning behind this is that some sharp edge will hurt the enemy in some way. The weapon can also be used as an ax, in which case it is fitted with a light wooden handle, with the staff made very short.

Some African weapons have been classified as throwing knives, when in actuality these weapons were used as currency, or as symbols of status. These knives were never meant to be used, or thrown for that matter. Others were used in a ceremony where two different tribes exchanged knives. This was done by having each tribe line up, calling out the name of the recipient and throwing the knife. This was done to exchange tribal wealth and keep the peace.

Reference:

Wilkinson, Frederick. *Edged Weapons*. New York: Doubleday and Company Inc, 1970.

Pg. 181.

Spring, Christopher, "African Hilt Weapons" In "*Swords and Hilt Weapons.*" New York: Weidenfeld & Nicolson, 1989. Pgs. 204-217.

Bichhawa

The Bichhawa is a double-bladed, S-shaped dagger. The blades get their shape from earlier versions that were made from buffalo horns. The Bichhawa got its name from its resemblance to the sting of a scorpion called a Bichhuwa.

The Bichhawa has a padded knuckle guard in the shape of a loop. Sometimes the Bichhawa was combined with a Tiger Claw. According to *A Description of Indian and Oriental Armour*, the Bichhawa was worn by common people in Mysore and Hyderabad, concealed in the sleeve within a sheath.

References:

Egerton, Wilbraham. *A Description of Indian and Oriental Armour*. London: W. H.

Allen, 1896. Pg. 27

Pant, G.N. *Indian Arms and Armour Volume II*. New Delhi: S. Attar Singh Army

Educational Stores, 1980. Pgs 153-154

Stone, George Cameron. *A Glossary of the Construction, Decoration, and Use of Arms and Armor in All Countries and in All Times*. New York: Jack Brussel, 1934.

Pgs. 112-113

Catchpole

The word catchpole is a modern English term for a police implement used for catching and holding criminals. In its usual form it consists of a long staff with a U-shaped, metal head. Two spring-operated metal bars close the open end of the U. When pushed against the back of someone's neck the bars open and then close again around the throat. This hinders the criminal from movement. The catchpole was mainly used in Germanic and Scandinavian countries. Its use began some time around the 16th century and survived in Sweden until the middle of the 19th century.

Reference:

Blair, Claude. *European and American Arms*. London: Batsford, 1962. Pg. 22

Chastity Belt

The fundamental idea of the device was to prevent by force of the use of the female generative organ. The chastity belt consists of two main parts, a band of flexible metal and a perforated plate or plates. The metal band hangs above the hips. The plate, which can be made from bone, metal or ivory, is hinged to the band in the front. The plate has a hole just large enough to allow urination but small enough to not allow a finger inside. The anterior is a similar plate with a hole for excrement hinged to front plate and to the back of the flexible band, also not allowing entry of any kind.

It's hard to believe that such a device could be used. The belt cannot even be worn for long periods of time. Women risk death by wearing it due to irremovable toxic accumulations and also from cuts from the iron. Therefore it can only be worn for short periods of time from a few hours to a day.

There is no concrete evidence as to when the chastity belt actually first appears in Europe. There are many myths such as the use of the chastity belts being placed on the wives of knight-crusaders going to the HolyLand. There are also occasional occurrences of the idea of something like a chastity belt in fictional stories such as the *Guigemar Epic* of the 12th century, which exhibits strong Oriental influences. In the early 15th century we actual see some possible evidence that the chastity belt exists. In Konrad Kyeser von Eichstadt's military encyclopedia *Bellifortis* dated 1405 there is what appears to be an illustration of a chastity belt (Kyeser, 130r). Under this illustration Kyeser states, loosely translated, "...made of iron, hard and could be locked, the underwear of Florentine women."

It isn't until the 16th century when more of these works appear, in which the chastity belt is mentioned to be in use at the time. In the middle of the 16th century Pierre de Bourdeilles, Abbe de Brantome, a writer with brilliant wit, wrote *Les Vies des Dames galantes*. This long series of stories of sexual manners and customs of the time mentions girdles of chastity in France. Translated from French:

In the time of King Henry, there was a certain dealer in metal goods who brought a dozen devices to the fair of Saint-Germain for restraining women's things, made of iron and fastening around the waist like belts, with a part that went underneath and fastened with a key; they were so cunningly made that no woman who was restrained by one could manage to indulge in sweet delights.... It is said that there were some five or six troublesome and jealous husbands who bought them, and used them to restrain their wives in such a manner that they might well say 'Farewell, good times'. (Dingwall, 45-46)

Born in 1619, Gedeon Tallemant, Sieur Des Reaux, chose a legal profession but had much different literary tastes. Through marriage he allied himself with the Hotel de Rambouillet in which through observation he would be able to write the full gossip and scandal of the time in volumes. In one of these volumes he mentions a Nicolas le Jay who in 1630 was appointed President of the Parliament in Paris. Translated from French this is what he had to say:

...the President was entreated by a pretty woman, who claimed that her husband was so jealous, that when he left he put an iron truss on her; this inflamed the president: the truss was not so closed that it could not be pulled back... (Dingwall, 48)

True these are just stories and by no means does it prove that the chastity belt did exist but it can be hard to believe that such stories were all made up.

Jean Buvat tells of another story involving a chastity belt in his *Regency Journal*, written between 1715 and 1723. He speaks of Charlotte Aglae d'Orleans, born in 1700, also known as Mlle. De Valois, who had married the Prince of Modena. This marriage to

the Prince of Modena wasn't very good at all. In Buvat's Journal he explains the prince's treatment of Mlle. De Valois and the use of a chastity belt on her:

It was also said beforehand that jealousy obliged the Princess, soon after her arrival at Modena, to submit to the law which this insupportable obsession has established there, as well as in other courts in Italy, even among people of less distinction, which is to wear a kind of padlock closed with a key, which is carefully guarded by the husband. This is like a velvet belt that encloses the haunches and thighs of the woman, so that the padlock is equally held up and applied directly to her parts, so that she finds herself entirely covered, leaving her only the necessary opening, when she needs to urinate, for the passage of the water. (Dingwall, 50)

This passage suggests that Buvat doesn't know exactly how the chastity belt was used. This is only a story of which even Buvat is unsure of the specifics and cannot be proven. If however the words could be accepted one can see that device appeared sometime around the 15th century and was used in Italy amongst the rich.

In 1889 a chastity belt was discovered on the corpse of a young woman in a little provincial town in Upper Austria (Dingwall, 84). The skeleton was wearing clothing with a pattern that dated it back to the 17th century. Unfortunately during this time there were a great number of archeological forgeries. Whether this discovery was real or not, it isn't until the late 1800's when the existence of chastity belts has some true evidence.

It has been reported that some old Sicilian and Spanish women still alive today remember chastity belts being worn as protection from rape by quartering soldiers and also from men staying in inns, while working there (www.cecut.org.mx/galeria/tortura/chastity.htm).

In closing, given the evidence brought forth we can see that such a device was built, but whether it was used or not we are unsure. We feel that it may have been used in a few isolated incidences, but it was never used to the extent it was intended for. Few, if any, surviving examples are thought to predate the nineteenth century.

References:

Dingwal, Eric John. *The Girdle of Chastity*. London: George Routledge & Sons LTD, 1931. Pgs. 2-5 & 33-35.

Harlow, John. "Damsels not distressed by medieval chastity belt" *The Sunday Times* [London] 23 June 1996 :1+.

The Chastity Belt. [Online] *Tijuana, Mexico: Centro Cultural Tijuana, Available HTTP: <http://www.cecut.org.mx/galeria/tortura/chastity.htm>*

Coin Sword

The coin sword was a Chinese charm that hung on the cots of newborns to ward off evil spirits.

References:

Wilkinson, Frederick. *Arms and Armor*. New York: Hamlyn Publishing Group Limited, 1978. Pg. 150

Gorgets

The gorget is a piece of armor that was worn around the neck, and was part of a suit of armor made of steel or iron. The gorget was designed to protect the upper shoulders and the neck region, and was originally worn under the corslet (the breast and back plate) to support the corslet's weight. Often the gorget would be decorated to match the suit of armor.

As the practice of putting designs on the gorgets became more common, the designs became more elaborate. The designs were inlaid with different types of metal such as gold or silver, or colors were enameled directly onto the steel. The gorget began to symbolize positions of rank and nobility.

As European countries abandoned armor and began using military uniforms, the gorget remained. The gorget continued to represent status or rank. It eventually became much smaller, horseshoe-shaped, and about the size of a collar necklace.

In the late 16th century Japanese soldiers who had traded with European soldiers began incorporating the gorget into their armor. This was called the *uwa-manchira* and was worn above the curiass. The gorget has been used as recently as World War II, when the German army used it to represent the Air Corps Division. Collectors especially covet gorgets from this era.

Also documented are Native Americans who kept gorgets from defeated European and European-American soldiers and handed them from one generation to the next. Presently there are variations on the style that have been made into a type of collar jewelry that is popular in the southwestern United States.

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Pgs. 97, 196

Creations by the Artist Kenneth Johnson [Online] Santa Fe, New Mexico: Kjewelry,

Available HTTP: <http://www.kjewelry.com/gorgetts.htm>

Whitman Militia [Online] Moorestown, NJ Wittmann Militaria, Availble HTTP:

<http://www.wwiidaggers.com/gorgetts.htm>

Gun-Shield

This sixteenth-century English gun-shield represents a type which is the only known example of Western matchlock ignition pistols. At least sixty-eight gun-shields of this type were produced. Over thirty of them still exist, of which six were recovered in the 1980s from the wreck of Henry VIII of England's warship the *Mary Rose*.

Sources suggest that King Henry's bodyguard were to have used the gun-shields as the king's personal defense. The barrel of the gun was extremely short and it would only be accurate to a few feet. Therefore it would only be useful for close range combat.

The firearms contained in these shields were of the breechloading type. A cartridge was loaded into the breech of the weapon and locked into place by a pivoted cover. A match cord was used to light the gunpowder and fire the gun.

Documents listing the inventions provided by Giovanni Battista da Ravenna and Company in 1544 listed the gun-shield. Only a few of Italian make and design have been found. It is possible that the other gun-shields found were modeled after these. An Indian gun-shield from Rajputana is preserved in the British Royal Armouries.

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Educational Stores, 1980. Pg. 91.

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Norman, A.V.B. *Treasures from the Tower of London*. London: Lund & Humphries
Publishers, 1982. Pgs. 42-43.

Jamadhar

The Jamadhar or Katar is a dagger weapon exclusively found in India. Jamadhars were in use as early as the late 17th century until the late 19th century. The Jamadhar was a standard weapon used by all military classes. The Jamadhar has a very unique hilt that is made up of two bars that run along the sides of the hand. Connecting the two sidebars is one or more cross bars, where the weapon is gripped. The most common blade is double-edged and very wide.

Not all Jamadhar blades are the same. Decorations on the blade can include flowers, hunting scenes, various animals or gods. Also on some there are inscriptions of prayers blessing the blade. Variations on the common Jamadhar have forked or jagged blades. An example of this is the spear-tipped blade. This shaft of the blade is thin and wavy bladed and the point in the shape of a spear resembling the leaf of a plant.

Another adaptation is the Jamadhar pistol, which has pistol barrels located on the sidebars. Others styles have moving parts in which the blade separates into multiple blades when the crossbars are squeezed together. An example of this can be seen in the scissors-blade Jamadhar shown here.

References:

Pant, G.N. *Indian Arms and Armour Volume II*. New Delhi: S. Attar Singh Army

Educational Stores, 1980. Pgs. 162-173

Wilkinson, Frederick. *Edged Weapons*. New York: Doubleday and Company, 1970. Pgs. 217-218

Wilkinson, Frederick. "India and Southeast Asia." In Michael Coe et al., *Swords and Hilt Weapons*. New York: Weidenfeld & Nicolson, 1989. Pgs. 186-203

Rawson, P. S. *The Indian Sword*. London: Herbert Jenkins, 1968. Pg. 23

Khud Helmet

In India, during the 16th to 18th centuries, a type of helmet called the Khud was used. It was very similar to Persian and Turkish helmets. It was bowl-shaped with a point on the top. On the top of the point there was a large spike or plume. On North Indian helmets there were two small tubes to hold more feathers. Some helmets have been found with as many as four plume holders but two is much more common. The feathers were usually from herons but sometimes peacock feathers were used. In the front of the helmet there was a nose guard that could slide down over the face. On Persian helmets the nose guard could be held in the raised or lowered position but on Indian helmets the nose guard was fixed in place. Attached to the back and sides of the helmet was mail that would come down over the shoulders. On the helmet there were gold or silver decorations engraved or inlaid. Inside the helmet was a padded lining. A head cloth inside served to cushion the head.

The Persian version of the helmet was called the Kulah Khud. Aside from the locking nose guard there were some small differences from the Indian helmet. The helmet usually covered more of the head. The helmet could become very hot if it was worn all day under the sun so a cloth was wrapped around it. Some Persian helmets have demon faces and horns attached to the helmet. According to Grancsay the horns were symbols of defiance or victory.

References:

Pant, G.N. *Indian Arms and Armour Volume III*. New Delhi: S. Attar Singh Army Educational Stores, 1980. Pg. 47, 59.

Robinson, Russell H. *Oriental Armour*. New York: Walker and Company, 1967. Pg. 35, 38, 99.

Grancsay, Stephen V. *Arms and Armour*. New York: The Metropolitan Museum of Art, 1986. Pg. 477

Kora

The Kora is a war-saber chiefly used in Nepal. Nepal was eventually invaded and conquered by the Gurkhas, a Himalayan people, in 1789. These Gurkhas introduced the Kora, their most traditional and most widely used weapon.

The Kora somewhat resembles weapons of the East Indian Hill people, but it more directly descends from the forward-angled swords depicted on viragals, tombs of military heroes. These viragals date the Kora as far back as the 8th to 9th century.

The Kora has a simple hilt with two circular disks at either end of the grip. The blade widens gradually from the grip and then turns sharply to one side almost making a 90° angle at times. The inside edge is sharpened and the majority of the weight of the saber is on the back edge. Koras are usually plain but some very ornate ones have lotus, star or sun symbols stamped into the upper part of the blade on both sides. They may also have gilded rims to the guard and pommel plates. According to Frederick Wilkinson, although the design is unusual it is an extremely useful cutting weapon and therefore had tremendous military success for the Gurkhas (222).

By 1814 the Gurkhas' territory had grown large and had come in conflict with the British East India Company leading to the Gurkha war. In 1816 the Gurkhas fell, Nepal became a British territory and many Koras were taken as war spoils. With Gurkhas still the ruling class in Nepal today, Koras continue to be used as woodcutting instruments and for decapitating animals in rituals.

References:

Pant, G.N. *Indian Arms and Armour Volume II*. New Delhi: S. Attar Singh Army Educational Stores, 1980. Pgs. 54-55.

Rawson, P. S. *The Indian Sword*. London: Herbert Jenkins 1968. Pgs. 52-54.

Wilkinson, Frederick. *Edged Weapons*. New York: Doubleday & Company Inc., 1970.

Pg. 222.

Kris Knife

The Kris knife can be found in Indonesia, mainly in Malaya, Java, and Bali. The weapon can be dated to as early as the fourteenth century. Its origins are probably from Java. It is a traditional weapon of the Indonesian people. As a symbol of status Indonesian men wore multiple knives, some passed on from father to son. The traditional costume is not complete without of the Kris Knife.

Not all blades of the Kris Knife are wavy. Some are straight. The blade of the knife is made from smooth steel or iron, or beaten together from several iron strips. These blades are often decorated ornamentally, possibly inlaid with jewels or metal. The widening at the hilt, called the *sampir*, forms a type of guard analogous to the European quillons. The handle can be made of wood or metal.

According to Šolic the wavy blade of the knife represents the mythological snake called the Naga. The more curves in the blade the more value it accrues. This is because only high officials carried blades with many curves, making these blades more rare. Often the hilt is in the shape of an animal's or a bird's head. This design may have derived from similar Indian lion-headed hilts. This influence occurred when some provinces of Indonesia came under the control of India. The hilt can be made of wood, metal or ivory. The hilt also became more elaborate the more important the official who owned the knife.

Larger Kris knives are called *sundag* or *suluk*. The blade is polished smooth and the top of the straight grip ends in a beaked pommel.

References:

Šolic, Václav. *Swords and Daggers of Indonesia*. London: Spring Books, 1968.

Pgs. 1-4, 8-10.

Wilkinson, Frederick. *Edged Weapons*. New York: Doubleday and Company Inc., 1970

Pgs. 184-186.

Maru

The Maru, which also is sometimes called *madu*, *maruo*, or *singaura*, means literally “death”. It is typically an Indian, especially Maratha, parrying shield or thrusting weapon. It has a pair of horns, usually from a buck, fastened together with the points extending in opposite directions. They are connected with a handle and have pointed steel caps on the end. In the center covering the horns there is a small shield, made of either leather or metal. Other examples of Marus are made completely out of metal. The Maru can be used a stand-alone weapon which is held in the right hand. It can also be used by a swordsman as a shield held in the left hand. Used this way it is similar to European sword-and-buckler play. In the hands of an experienced swordsman the Maru is extremely effective but in the hands of an amateur it can be extremely lethal to the user. In the national Museum in New Delhi an example of the Maru was an incredible 5 feet 5 inches long with a 9-inch diameter shield.

References:

- Pant, G.N. *Indian Arms and Armour Volume III*. New Delhi: S. Attar Singh Army Educational Stores, 1980. Pg.
- Wilkinson, Frederick. *Edged Weapons*. New York: Doubleday & Company Inc, 1970.

Patta

The Patta is a single-handed Indian gauntlet sword. This sword was predominantly found in the southern regions of India. The Marathas invented the Patta, and it was their most favored weapon.

The Patta consists of a combination of a long double-edged blade and a gauntlet. The blade is usually European. A pair of metal settings attaches the blade to a gauntlet. These settings run down the face of the blade on both sides. The gauntlet covers the arm almost up to the elbow. The gauntlet has an iron strap hinged to the upper end that hooks around the arm. The grip is located inside the gauntlet, at a right angle to the blade.

The inside of the gauntlet is often padded to reinforce the grip and to reduce the shock of blows. The outside of the gauntlet is often covered with metal-worked decorations or embossed. A few were even studded with jewels. Some of the decorations depicted battle scenes. Others had prayers, or pictures of gods or large animals on them.

The Patta was used by all military classes, particularly by experienced swordsmen. For one who is inexperienced with the Patta it can be difficult to use but it is the most effective of all Indian swords. It is wielded by the strong muscles of the fore and upper arm, and not by the wrist. This allows the sword to deliver more powerful blows and thrusts at any angle. This method also greatly reduces the amount of fatigue, due to the use of the upper arm muscles (Rawson 46).

Based on comparisons to the Jamadhar, the Patta seems to have evolved from this weapon. The Jamadhar has a set of sidebars to protect the sides of the hands. Later versions have a plate guard parallel to the blade, which connected to the sidebars and the hand guards. This serves to protect the back of the hand and the knuckles. This design

produced a small gauntlet. Then with the addition of a long double-edged blade you can see where the Patta evolved.

References:

Pant, G.N. *Indian Arms and Armour Volume II*. New Delhi: S. Attar Singh Army

Educational Stores 1980, Pgs. 61-68

Rawson, P. S. *The Indian Sword*. London: Herbert Jenkins, 1968. Pgs. 44-47

Persian Parade Maces

The Persian Parade Mace had a dual function. The mace served as a symbol of office, and as a weapon. These weapons possibly originated with the Mameluks. Evidence of their existence dates to the Ottoman Sultan, Selim the Grim, in his Egyptian campaign of the Sixteenth Century. The parade maces found were most likely spoils of war from this Egyptian campaign

The maces are often made of watered steel, with gold damasking. On the heads are the cartouches of the blacksmith who made them. These parade maces usually have heads shaped like those of bulls or demons, and were meant to symbolize the ferocity of the bearer. A bull-headed mace was said to have been carried by Genghiz Khan and Tamerlane.

A majority of the Persian Parade Maces found in current collections are made solely for parade use and date to the eighteenth and nineteenth century.

References:

North, Anthony. *Islamic Arms*. New York: Stemmer House, 1986. Pgs. 40-42.

Staff Weapons

Staff weapons have a wooden shaft and some type of metal head. Many of them are derived from peasants' farm tools. Without any improvement at all these tools can have military use, although some improvement to them can bring out their full battlefield potential. These tools fall into certain group types. The pitchfork seems to be the origin of the military-fork and the corsesca. The scythe has a direct tie to the military scythe. The pruning hook and sickle was the origin of the military the bill. The axe gave rise to the halberd.

From one weapons expert to another the definition of specific types of polearm can vary. Polearms can have elements of many groups, like having a hook, spearhead and an axe head, which makes it even harder to define and categorize them.

Polearms were originally low-status weapons in that they were cheap weapons for ordinary soldiers, yet many were still made for ceremonial use and as badges of rank after they had become obsolete.

References:

Reid, William. *Arms Though the Ages*. New York: Harper and Row Publishers, 1976.

Pg 73.

Purcicelli-Guerra, Arturo. "The Glaive and the Bill: The evolution of farm tools into the most basic of polearms." In *Art, Arms, and Armour: An International Anthology*.

Chiasso, Switzerland: Acquafressca Editrice, 1979. Pgs 3-4.

The Bill

The bill was efficient against almost all types of soldier. The design of the bill has three main parts. The parts from the pruning hook that can be seen in the bill are a hook for pulling soldiers off their horses and a sharpened blade for knocking down

soldiers on foot and for cutting. Also there was an added improvement of a reinforced spike for running a man through. Up to 15th century the bill continued to be refined from its original farm tool state, but around 1520 armor improved and the amount of armor increased making the bill ineffective. In the 17th century France still used many highly ornate bills as badges of rank.

References:

Purcicelli-Guerra, Arturo. "The Glaive and the Bill: The evolution of farm tools into the most basic of polearms." In *Art, Arms, and Armour: An International Anthology*. Chiasso, Switzerland: Acquafressca Editrice, 1979. Pgs 8-9.

The Glaive

The glaive has a single curved blade. The design of the blade is suited for slashing and thrusting. Towards the middle of the 16th century, glaives tend to disappear from practical use. In the 17th century some still remain, highly ornate with gold and silver, and used only by guards. One type, which is extremely large, extremely heavy and ornate, was used only in Italy by the Doge's guard and the guards of patrician families. These glaives not only lost all value as weapons but also lacked any of the grace of the fighting arm they descended from.

References:

Purcicelli-Guerra, Arturo. "The Glaive and the Bill: The evolution of farm tools into the most basic of polearms." In *Art, Arms, and Armour: An International Anthology*. Chiasso, Switzerland: Acquafressca Editrice, 1979. Pgs. 6-7.

The Corsesca

In the middle of the 15th century the corsesca was developed in Italy. It has a stiff middle blade with two-edged blades curved upwards at the base resembling the lugs of the medieval lugged spear. The Friuli spear, also developed in Italy, was a later version of the corsesca that had the two blades curving in the opposite direction.

References:

Reid, William. *Arms Though the Ages*. New York: Harper and Row Publishers, 1976.

Pgs. 73-75.

The Partisan

The partisan has a long triangular, tapering spearhead. It originated in Italy around middle of the 15th century. In England it was also known as the langdebeve and in France it was called the Langue de Boeuf. This means literally “ox tongue”, an allusion the shape of the spearhead. It was simple and efficient and was used in many European armies. Some had lugs, which were gilded, engraved, blued and more elaborate. These were carried bodyguards of royalty, dukes, or bishops. Some are still carried on special occasions by Yeoman Warders of the Tower of London.

References:

Wilkinson, Frederick. *Edged Weapons*. New York: Doubleday and Company, 1970.

Pgs. 108-109.

The Halberd

Apparently Swiss in origin, this was the favored weapon of Swiss mercenaries. The earliest recorded reference was from the 13th century. In its earlier form it featured an axe head. In the 15th century the halberd evolved to have spikes as well. It was effective both for hacking and thrusting. By about the 16th century most European armies

used them. The axe heads became more concave and the spike became more elaborate which made it a less substantial weapon. By the end of the 17th century it was only for ceremonial use. At this time the halberd was used as a badge of rank and for signaling orders to troops.

References:

Wilkinson, Frederick. *Edged Weapons*. New York: Doubleday and Company, 1970.

Pgs. 106-8.

Retractable Blade Pike (Joe Brown Pike)

The Retractable Blade Pike shown here is one of the famous “Joe Brown” Pike models. The pike is made up of a spring-catch retractable blade that slides into the shaft of the pike. The shaft of the weapon is oval shaped and hollowed out. The shaft is six feet seven inches long and is made up of two separate pieces, held together by iron and brass bands. The top of the shaft is covered with a flat piece of iron, with a slot allowing the blade to pass through; the bottom end is capped with a rounded iron butt piece.

The double-edged blade is made of steel. The fourteen-inch blade and its extension handle ejected from the shaft by two springs. These springs were made of steel and were two feet long. When the lower spring catch was released, the blade would slide out with a force that could easily impale any incoming enemy. The blade was also designed to be retractable.

None of the weapons found to this day have the springs inside the pike. There is also no record of these pikes being used during combat. It is assumed that during the Civil War Georgia did not have enough steel to manufacture the needed springs for the pikes. At that time Georgia was not able to produce the one-inch springs used for guns, much less the two-foot long springs needed for the pikes, and the project was abandoned.

The inventor was a Methodist minister from Vermont, Rev. Dr. Graves, who had lived in Georgia prior to the war. An article from the *Atlanta Constitution*, dated July 14th 1912, written by Mr. Clarke Howell Jr. stated “there is not a single person in Georgia who has not heard of the famous Joe Brown Pike”. The pikes were possibly manufactured in Macon or Chattanooga Georgia, but by whom is not known. The pikes were later sold at a government auction in 1904.

One might wonder if pikes of this design are really useful. Some would question the reasoning behind making a spring-loaded weapon when thrusting will perform just as well. The blade was also designed to be disguised from view, but it would defeat the purpose if a uniformed soldier was carrying the weapon. The manufacturing of such a weapon would require more resources than a standard infantry pike.

References:

Brown, Rodney Hilton. *American Polearms 1526-1865*. New Milford: N. Flayderman, 1967. Pgs 125-127

Tiger Claw

The Tiger Claw or Baghnakha is a weapon from India. As its name implies, it is meant to emulate the claws of a tiger. Tiger Claws have between two and five curved blades fixed to a cross bar. You hold the cross bar by putting a finger in each of the two rings that are attached to the ends of the cross bar. The thumb ring sometimes has a small spike attached to it. Depending on the orientation of the rings and the size of the blades, the Tiger Claw can be concealed in the palm of the hand.

The Tiger Claw was not widely used until Shivaji, the founder of the Maratha Empire, used one to assassinate Afzal Khan, the general of the army of Bijapur in 1526.

Reference:

Pant, G.N. *Indian Arms and Armour, Volume II*. New Delhi: S. Attar Singh Army Educational Stores, 1980. Pg. 153-155.

Two-Handed Sword

The two-handed sword originated in Germany and Switzerland but eventually spread throughout Europe. Different regions in Europe developed their own versions of the two-handed sword. For example, the style of the two-handed sword developed in Scotland became known as the Claymore.

During the 14th century plate armor was becoming more common. This led to the development of the hand and a half sword, which could be used with either one or two hands. The blade was lengthened and made stronger and the grip was also increased in size so two hands could hold the sword at once. Eventually versions were made exclusively for two-handed use.

Two-handed swords ranged from five to six feet in length. Despite their size, two-handed swords generally only weighed eight to twelve pounds. The blade was either straight or “flamboyant.” Grancsay notes that the theory behind the flamboyant, or wavy, blade was that it would increase the angle between the blade and a surface making it cut better. Because of the size of the sword it could not be carried on a belt, so soldiers carried it on their shoulders like a soldier today would carry a rifle. The ricasso was covered in leather so that the sword could be gripped higher on the blade to give the soldier better control. Also, this allowed the sword to be used for thrusting.

Although developed in the 14th century, the two-handed sword did not come into wide use until the 16th century. The most notable users were the “Landsknechts.” These were German infantrymen specialized in the use of the two-handed sword. To be allowed to use a two-handed sword a Landsknecht would have to be certified by a master swordsman. Once certified, the soldier would receive double pay. Two-handed swordsmen were responsible for defending the regimental flag in battle.

Some swords were so heavy that there was no way they could be used in battle, suggesting they were for decorative or ceremonial use.

References:

Wagner, Eduard. *Cut and Thrust Weapons*. New York: Spring Books, 1967. Pg. 135

Wilkinson, Frederick. *Edged Weapons*. New York: Doubleday and Company Inc, 1970.

Pgs. 27-32

Appendix B

Glossary of Terms

East Indian Hill People - The Daos of the Garos and the Mikirs of Assam, an East Indian Country south of the Himalayas.

Gurkhas – Members of the Hindi religion who achieved dominance over Nepal in the 18th century

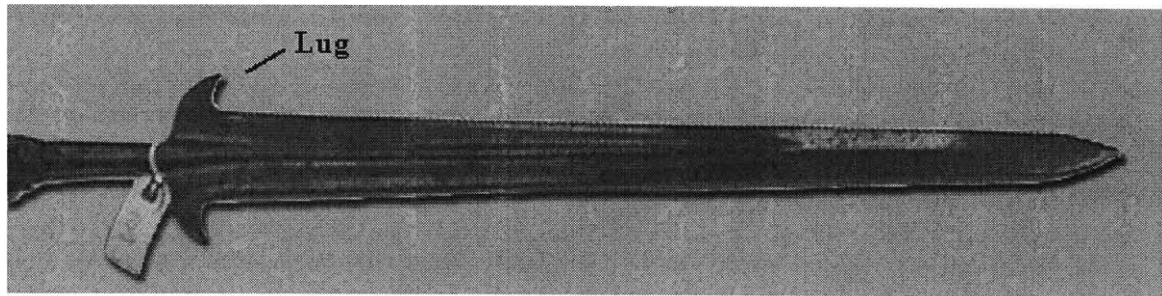
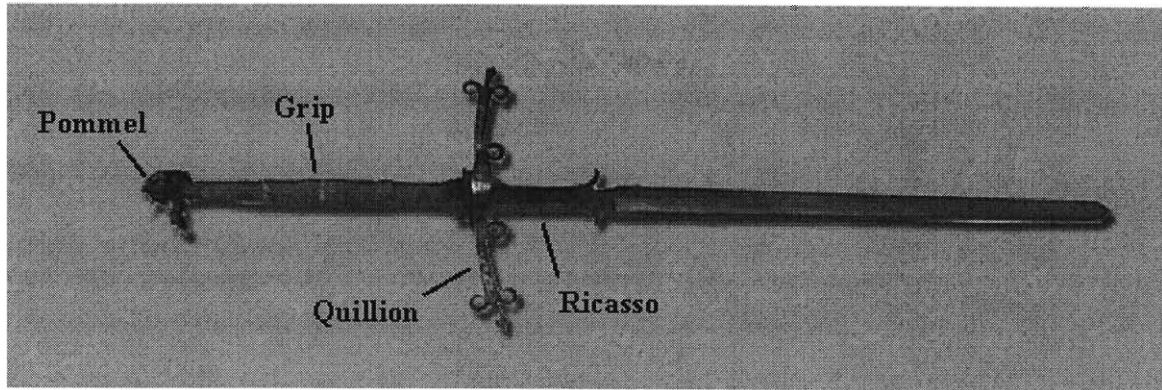
Mameluks - A member of a former military caste, originally composed of slaves from Turkey, which held the Egyptian throne from about 1250 until 1517 and remained powerful until 1811.

Marathas - The Hindi Marathas of Muslim India, who spoke the Marathi language of the ancient Marathi Empire. This group standardized the sword forms of the West Deccan. During the second half of the 17th century, under the leadership of Savaji, the Marathas became a consolidated nation. The Marathas also become one of the greatest military powers of India.

Match Cord – A thick piece of roped soaked in a combustible substance that allowed it to smolder slowly; it was used to ignite gunpowder in early firearms. Also called Slow Match.

Mysore - A city in Southern India, whose former name is Karnataka.

West Deccan – The SouthWestern area in the country of India.



Appendix C

The Database

The following database is a list of artifacts that the project group wanted to include in the exhibit. Of these artifacts, not all of them were researched, also not enough information was found. In the picture category its a yes or no, denoting whether a picture was taken or not. Pictures were not taken if research was not done on the artifact. Other pictures were not taken also because the artifacts were modern day 19th or 20th century replicas.

Ref#	Art. Name	WeaponType	Alt. Name	Origin	ProbDate	PermLoc	Picture	Description
	Armor Parts							
2589	Armor; "Maximilian"	Armor		South Germany (Augsburg)	1505-25	3WA10	N	
2031.13	Helmet	Armor	"kabuto"	Japan	18th c.	NS C64	N	
1175.1	Japanese armor	Armor		Japan	18th c.	NS C57	N	
1175.14	Japanese armor	Armor		Japan	18th c.	NS C68	N	
1175.2	Japanese armor	Armor		Japan	18th c.	NS C68	N	
2877	Maximillan Armor	Armor				3WA10	N	
1695.3	Mempo	Armor		Japan	Probably 18th c.	NS C60	N	
2048.2	Mempo	Armor	Face defense	Japan	18/19th c.	NS C69	N	
2468	Breastplate	Armor part		Europe	L 19th/E 20th c	NS A25	N	
2642	Buckler with dark lantern	Armor part		Italian	2nd 1/2 16th c.	NS H5	N	345 mm diameter x 400 mm H x 235 weight = 2 lbs., 14 oz
2530	Codpiece	Armor part	Brayette	Europe or United States	20th c. ?	NS B5	N	
951	Codpiece	Armor part	Brayette	Probably Europe	19th c.	NSB5	N	
856	Gauntlet; mitten	Armor part		Europe	19th c.(?)	NS B24	N	
3526	Gorget	Armor part		France ?	Perhaps 1q19thC	NSA22	Y	
368	Gorget	Armor part		Canada ?	Prob 1810- 1830	NS A22	Y	
420	Gorget	Armor part		Britain	1770s	NS A22	Y	

No#.222	Gorget	Armor part		France	L 18th/E 19th c	NSA23	Y	
980	Gorget; frontplate	Armor part		Western (?) Europe	End 17th c.	NS A23	Y	
2539	Mask	Armor part		Probably Europe	18th/19th c. ?	NS B2	N	
1573	Shield; Tamarang	Armor part		Australia	19th/20th c.	OS table	N	
1224	Target	Armor part	Rondache	Germany (probably Nuremberg)	1600-1610	3EA2	N	
1760	Torso defense	Armor part		Europe	18th c	NS A19	N	
	Edged							
1953	Bagh-nakh	Edged weapon	"tiger claw"; wagh-nakh;	India	19th c.(?)	NS D37	Y	
142	Broadsword	Edged weapon	Bilbo	Spain	17/18th c.	3WA1 col.	Y	
1368	Broadsword; two-handed	Edged weapon		Europe	19/20th c.	OS row 7	N	
1369	Broadsword; two-handed	Edged weapon		Europe (perhaps Germany)	19/20th c.	OS row 7	N	
1370	Broadsword; two-handed	Edged weapon		Germany (Munich)	1925-30	OS row 7	N	
1710	Broadsword; two-handed	Edged weapon		German (Munich)	1920-1931	OS row 8	N	
2743	Broadsword; two-handed	Edged weapon		Germany	4th q. 16th c.	OS row 7	Y	
2964.1	Broadsword; two-handed	Edged weapon		Germany	last qtr 16th c	OS row 8	Y	
2964.2	Broadsword; two-handed	Edged weapon		Germany (Passau? blade)	15/16th c.	OS row 6	Y	
3132.2	Broadsword; two-handed	Edged weapon		Germany	2nd 1/2 16th c.	OS row 1	Y	
3462	Broadsword; two-handed	Edged weapon		probably Germany	1580-1600	OS row 3	Y	Blade: L = 48 1/2" W = 2 1/4"; Ricasso: L = 10"

401	Broadsword; two-handed	Edged weapon		Europe	19th c.	OS row 3	N	
402	Broadsword; two-handed	Edged weapon		Germany (?)	19th c.	OS row 8	N	
666	Broadsword; two-handed	Edged weapon		Germany	last qtr 16th c	OS row 6	Y	
667	Broadsword; two-handed	Edged weapon		Germany (?)	end 16th c.	OS row 1	Y	
670	Broadsword; two-handed	Edged weapon		Germany or Denmark	19th c.	OS row 7	N	
1108.A	Daggar; Katar	Edged weapon		India	18th c. (?)	OS J4	Y	
22	Dagger	Edged weapon	"katar"	India	18/19th c.	OS K5	Y	
3149	Dagger; Bichwa	Edged weapon		S. India (Mahrattas)	19th c.	OSK4	Y	
2464	Dagger; Eared	Edged weapon		Europe (Spain ?)	15th or 19th c.	OS D10	N	
1552	Dagger; Katar	Edged weapon		S. India	18th/19th c.	OS L5	Y	
1553	Dagger; Katar	Edged weapon		S. India (Blade, Europe ?)	18th c.	OS L6	Y	
1554	Dagger; Katar	Edged weapon		S. India	19th/20th c.	OS L4	Y	
1556	Dagger; Katar	Edged weapon		S. India	17th/18th c.	OS L3	Y	
21.A	Dagger; Katar	Edged weapon		S. India	18th/19th c.	OS L5	Y	
2118	Dagger; Katar	Edged weapon	Scissors katar	India	L 19th c.	OS N3	Y	
2119	Dagger; Katar	Edged weapon		India	20th c.	OS N3	Y	
2391	Dagger; Katar	Edged weapon		India	18th c.	OSN2	Y	
2406.A	Dagger; Katar	Edged weapon		India	19th c.	OS D1	Y	

3651	Dagger; Katar	Edged weapon	Scissors Katar	India	19th/20th c.	OSP5	Y	
64.A	Dagger; Katar	Edged weapon		India	L 19th/E 20th c	OSL4	Y	
733	Dagger; Katar	Edged weapon		India (Tangore)	18/19th c.	OSJ2	Y	
735	Dagger; Katar	Edged weapon		S. India and Europe	19th (?) c.	OSL4	Y	
84.A	Dagger; Katar	Edged weapon		S. India	18th/19th c.	OSL5	Y	
2116.A	Dagger; Kris	Edged weapon		Malaya	19th/20th c.	OS C9	Y	19" overall length, down
2289.A	Dagger; Kris	Edged weapon		Philippines; Mindanao	19th/20th c	OS R2	Y	
3143.10	Dagger; Kris	Edged weapon		Philippines (?)	19th/20th c.	OSD12	Y	28 1/2" straight
3143.4	Dagger; Kris	Edged weapon		Philippines; Mindanao	19th c.	OSR2	Y	
3143.5	Dagger; Kris	Edged weapon	Tawi-tawi	Philippines; Mindanao	19th c.	OSR2	Y	
3143.7	Dagger; Kris	Edged weapon				OSR5	Y	
3143.8	Dagger; Kris	Edged weapon	Tawi-tawi	Philippines; Mindanao	19th c.	OSR3	Y	
320	Dagger; Kris	Edged weapon		Malayan archipelago	19th c.	OS L8	Y	
3326	Dagger; Kris	Edged weapon	Kingfisher Kris	Malayan archipelago	19th c.	OSO2	Y	
3555	Dagger; Kris	Edged weapon		Malayan archipelago	19th/20th c.	OSG2	Y	
3591.A	Dagger; Kris	Edged weapon		Malayan archipelago	19th c.	OSH3	Y	23 3/4" straight
3601	Dagger; Kris	Edged weapon		Philippines	19th/20th c.	OSR3	Y	

1101	Dagger; parrying	Edged weapon	'main gauche'; left-hand dagger	Europe, after Italian (Neapolitan) style, 1650-99	19th/20th c	OS K3	Y	
1549	Gauntlet-sword	Edged weapon	"Pata"	India and Europe	17/18th c.	NS G23	Y	3 lbs., 13 oz.
176	Guard of two-handed sword	Edged weapon		Probably Germany	16th c.	NS I14	N	
88	Katar	Edged weapon	Folding Katar; Scissors katar	India	19th/20th c.	OSJ3	Y	
1605	Knife	Edged weapon		Africa	19th/20th c.	OS M3	Y	
3325	Knife	Edged weapon		Perhaps Northern archipelago/India	19th/20th c.	OSO7	Y	
3495	Knife	Edged weapon		[African]	[19 th c.]	OSR5	Y	
1606	Knife; sacrificial	Edged weapon		Africa (N. Zaire)	19th/20th c.	OS M6	Y	
3639	Machett	Edged weapon				OSR5	Y	
2456	Parrying weapon (?)	Edged weapon		China	19th c.	OS N7	Y	
3062	Rapier	Edged weapon	Cup-hilt rapier	Europe	E 20th c.	OSH6	N	
35	Rapier	Edged weapon		Europe	19th/20th c.	OS I5	N	
3286	Rapier; expanding	Edged weapon		Europe	19th c.	OS E4	Y	
870	Spontoon	Edged weapon	'Unteroffizierkurz gewehr', M (model) 1755.	Germany (Prussia)	2nd 1/2 18th c.	OS bin 4,center	Y	
1604	Sword	Edged weapon	Poto	Africa (Zaire)	19th/20th c.	OS M5	Y	
2240	Sword	Edged weapon		India	19th c.	OS D14	Y	37" straight
3479	Sword	Edged weapon		Africa	19th/20th c.	OSF15	Y	

3640	Sword	Edged weapon		[Eritreen]		OSO7	Y	
3261	Sword; boarding	Edged weapon		Italy (Venice)	1500-1525	OSI1	Y	
624	Sword; hunting	Edged weapon	"Hirschfänger"	Probably France	1765-70	4EB4	N	
2410	Sword; Kampilan	Edged weapon		Malaya	19th/20th c.	OS C12	Y	44" overall length, straight
3143.11	Sword; Kampilan	Edged weapon	Campilan	Malaya or Philippines	19th/20th c.	OSD13	Y	38" straight
2058	Sword; Kaskara	Edged weapon		N. Africa, Sudan	19th c.	OS C1	Y	40" overall length.
2050	Sword; Kora	Edged weapon		Nepal	19th/20th c.	OS C4	Y	27" overall length, down center
2179	Sword; Kora	Edged weapon		Nepal	19th/20th c.	OS C15	Y	28" overall length from pommel to
304.A	Sword; Kora	Edged weapon		Nepal ?	19th c.	OS A7	Y	
1550	Sword; Pata	Edged weapon		S. India (Mahrattas)	17th/18th c.	OS K1	Y	
2061	Sword; Pata	Edged weapon		S. India	19th c.	OS C1	Y	47" overall length, down
2221	Sword; Pata	Edged weapon		India	19th/20th c.	OSC13	Y	53" overall length, straight
3063	Sword; Pata	Edged weapon		India	19th/20th c.	OSD5	Y	
2418	Sword; Patta	Edged weapon		S. India	17th/18th c.	OS D3	Y	37 1/2" overall length, straight
1602	Sword; saber-like	Edged weapon	Early throwing knife form	Africa, Zaire	19th/20th c.	OS B7	Y	
1612	Sword; short	Edged weapon	Long dagger	Africa, Zaire	19th/20th c.	OS M7	Y	
2072	Sword; Tegha	Edged weapon		India	19th c.	OS C5	Y	34 1/2" overall length, down back of sword
2798	Sword; two-handed	Edged weapon		Europe	19/20th c.	OS row 1	N	

635	Sword; two-handed	Edged weapon		Northern Germany	L 16/E 17th c.	OS row 3	Y	
3321	Blade; kris	Edged weapon part		Malayan archipelago	E 20th c.	OSO2	Y	
2826	Scythe blade	Edged weapon part		Hungary (?)	1848/9	OSF15	Y	
	Firearm							
1042	Linstock	Firearm accessory		Germany	18th c, blade	OS bin 5,center	N	
2546.11	Linstock	Firearm accessory		N. Italy	L 16th c.	OSbin 6,left	N	
	Helmet							
2702.1		Helmet		Germany	1520-19 th c.	NSE22	N	
2811		Helmet		Japanese		NSC69	N	
2970.3		Helmet		Germany	[1850	NSE12	N	
2973		Helmet		Japanese	[17 th c.]	3WA4 NS D64	N	
3037.2		Helmet		[Englad]	[17 th c.]	NS E19	N	
3139.7		Helmet		Japanese		NSC64	N	
3139.8		Helmet		Japanese		NSC75	N	
3542		Helmet		[Persian]	[19 th c.]	4WB5	Y	
No#.415		Helmet				NS H32	N	
No. 449		Helmet	Gold	Poss. Russian		NSE37	N	
1142	Closed-burgonet	Helmet	"Totenkopf"	Savoy	about 1600	NS G46	N	

1460	Close-helmet	Helmet		South Germany (Nuremberg)	Mid-16th c.	NS H34	N	
2538	Close-helmet	Helmet		South Germany	1520-25	NS E42	N	
2143	Helmet	Helmet		Japan	16-19th c.	NS D1	N	
2553	Helmet	Helmet	"Kulah khud"	Persia	19th c.	NS F1	Y	
881	Helmet	Helmet		W.Europe (?)	17th c.	NS E9	N	
2277.1 &2	Helmet and mempo	Helmet		Japan	19/20th c.	NS C48	N	
574	Helmet; mortuary	Helmet		England	1650-1700	3EB6	N	
No#.555	Helmet; mortuary	Helmet		England	17/18th c.	NS G45	N	
2401	Helmet; parade	Helmet		Persia	19th c.	NS E33	Y	
2958	Iron hat	Helmet		Flemish	c. 1650	NS G47	N	33.7 xm (L) x 30.0 cm (W) x 15.9 cm (H) 3 lbs., 2 oz.
231	Kulah Khud	Helmet		Persia	19th c.	NS E38	Y	
2971.5	Kulah Khud	Helmet		Persia	19th c.	NSE38	Y	
2974.3	Kulah Khud	Helmet				NSE38	Y	
3091.4	Kulah Khud	Helmet		Persia	19th C.	NSE11	Y	
3092.8	Kulah Khud	Helmet		India	L 19th c.	NSE14	Y	
2712.8	Mempo	Helmet		Japanese	L18th/E19th	NSC31	N	
2669	Triple-combed open burgonet	Helmet		South Germany (Augsburg?)	c. 1550-1555	NS H 11	N	29.0 cm H x 20.8 cm W x 29.5 cm D lbs., 12 oz
	Misc							

1891	Chastity belt	Misc.		Europe	19 th c.	NSG45	Y	
2531	Chastity belt	Misc.		Europe	16-17th c. (?)	NS H40	Y	H = 8 1/4" W = 10 7/16" D = 9 1/2" Weight = 14 oz.
1761	Mask	Misc.		Europe (perhaps France)	18th c. (?)	NS B2	N	
2135	Parrying weapon	Misc.		India	20th c.	OS Q1	Y	
3509	Sword; coin	Misc.	Good Luck coin sword	China	19/20th century	OSP2	Y	
	Missile							
2613	Arrow; "whistling"	Missile weapon		China (?)	19th c.	OS rolbin A1	Y	
2396	Javelin	Missile weapon		India	18/19th c.	OS bin 3,left	Y	
2315	Knife; throwing	Missile weapon		Africa	20th c.	OS Q5	Y	
2823	Knife; throwing	Missile weapon		Africa	20th c.	OSN5	Y	
3180	Knife; throwing	Missile weapon		Africa (Zaire)	19th/20th c.	OSO8	Y	
3759	Knife; throwing	Missile weapon		Fang / Kota	19th/20th c.	OSQ2	Y	
	Percussion							
3487	Axe	Percussion weapon	Hatchet	Africa	19th/20th c.	OSF15	Y	19" straight across back.
3493	Axe	Percussion weapon		S. India	19th/20th c.	OSD16	Y	
3116	Axe; Nzappa Zap	Percussion weapon		Africa (Congo)	19th c.	OSJ5	Y	
3117	Axe; Nzappa Zap	Percussion weapon		Africa (Congo)	19th c.	OSJ1	Y	
3320	Axe; Nzappa Zap	Percussion weapon		Upper Congo	19th c.	OSK5	Y	

3492	Axe; Nzappa Zap	Percussion weapon		Africa (Congo)	19th c.	OSJ2	Y	
1842	Axe; parade	Percussion weapon		Probably Persia	18th/19th c.	OS table	Y	
2818	Axe; parade	Percussion weapon		India	18th/19th c.	OStable	Y	
1575	Club	Percussion weapon		Probably Australia	19th/20th c.	OS table	Y	
1577	Club; Baggoro	Percussion weapon	wooden sword	Australia (Queensland)	19th/20th c.	OS table	Y	
1578	Club; Tewha-tewha	Percussion weapon	Taiaha	New Zealand	19th/20th c.	OS table	Y	
1625.2	Club; war	Percussion weapon		Oceania(?)	19th/20th c.	OSrolbin G8	Y	
1837	Flail (with concealed thrusting blade)	Percussion weapon		Europe	19th c.	OS C11	Y	
2103	Mace	Percussion weapon		Persia	18/19th c.	OS D11	Y	
2322	Mace	Percussion weapon	May be helmet or sword breaker	India	19th/20th c.	OS D11	Y	28" straight
2124.1	Mace; Fakir's crutch	Percussion weapon		India	19th c.	OS K5	Y	
2102	Mace; parade	Percussion weapon		India	mid 19th c.	OS C11	Y	41 1/4" overall length, straight
2821	Mace; parade	Percussion weapon		Persia	19th c.	OSF11	Y	
2822	Mace; parade	Percussion weapon		Persia	19th c.	OSD5	Y	30 1/2" straight
3029	Mace; parade	Percussion weapon		India	19th c.	OSE11	Y	34 1/2" straight; dia. of head 5"
3311	Sword breaker	Percussion weapon		Japan	18th-mid 19th c	OStable	Y	
2413	War hammer	Percussion weapon	Zaghnaal	India	18/19th c.	OS F11	Y	22" along shaft
87	War hammer; Zaghnaal	Percussion weapon		India	19th c.	OSJ4	Y	

	Polearms							
3095	Axe; crescentic	Staff weapon	Tipar	Persia or Tartar Culture	dated 1807/8	OSbin 4,left	N	
1046	Berdysh (Bardiche)	Staff weapon		Germany (Munich)	1920-1929	OS bin 4,right	N	
1111	Berdysh (Bardiche)	Staff weapon		Germany (Munich)	1920-30	OS bin 2,right	Y	
2960.1	Berdysh (Bardiche)	Staff weapon		Russia (Moscow?)	17th c.	OSbin 4,left	Y	
1170	Bill	Staff weapon		Italy	L 15th/E 16th c	OS bin 4,center	Y	
1793	Bill	Staff weapon	Roncone	Italy	E 16th c. ?	OS bin 4,right	Y	
1799	Bill	Staff weapon	Roncone	Italy	16th c.	OS bin 4,right	Y	
2546.7	Bill	Staff weapon	Roncone	N. Italy	2nd 1/2 16th c.	OSbin 5,center	Y	
2680	Bill	Staff weapon		England, probably	2nd 1/2 16th c.	OSbin 4,center	Y	
2880.2	Bill	Staff weapon	Roncone	Italy	late 16th c.	OSbin 4,right	Y	
3036.2	Bill	Staff weapon	Roncone	N. Italy	L 15th/E 16th c	OSbin 4,right	Y	
408	Bill	Staff weapon	Roncone	Italy	17th c. ?	OSbin 5,left	Y	
857	Bill	Staff weapon		England	ca. 1540	OSbin 6,center	Y	
1266	Bill; variant	Staff weapon		Central Europe ?	19th/20th c.	OS bin 4,right	N	
No#.44	Bill; variant	Staff weapon		possibly Italian	E 20th c.	OSbin 7,left	N	
2652	Catchpole	Staff weapon		Germany	L 16th/E 17th c	3WA3	Y	
2478	Corsesca	Staff weapon	corseque	Italy	16th c.	OS bin 7,left	Y	

3039.1	Corsesca	Staff weapon	'Friuli spear'	Northern Italy	ca. 1600	Osbin 2,left	N	
2481	Corsesca ("Bat-wing" Corseque); 'Chauve-	Staff weapon	Three-grained staff	N.Italy	1st half 16th c	OS bin 2,left	Y	
2546.4	Corsesca ("Bat-wing" Corseque); 'Chauve-	Staff weapon	Three-grained staff	Italy	1st 1/2 16th c.	OSbin 2,center	Y	
1788	Corsesca; Spear, Friuli	Staff weapon		Italy	1st quarter 17th c.	OS bin 4,left	Y	
2546.8	Corsesca; Spear, Friuli	Staff weapon		Italy (Friuli?)	L 16/E 17th c.	OSbin 3,center	Y	
2655	Corsesca; Spear, Friuli	Staff weapon	Corseque	N. Italy (Friuli)	ca. 1600-20	OSbin 2,right	Y	
2656	Corsesca; Spear, Friuli	Staff weapon		N. Italy	E 17th c.	OSbin 6,center	Y	
No#.25	Corsesca; Spear, Friuli	Staff weapon		Northern Italy (Friuli)	L 16/E 17th c.	OSbin 3,right	Y	
1900	Fauchard	Staff weapon		Italy	18th c.	OSbin 7,center	Y	
2546.19	Fauchard	Staff weapon	Glaive	Italy	last q. 16th c.	OSbin 3,right	Yy	
3036.1	Fauchard	Staff weapon	Glaive	Italy	16th c.	OSbin 7,left	Y	
1999.01	Folding spetum	Staff weapon		Italy (perhaps Milan)	c. 1550		Y	L = 81 5/16" (extended) L = 42 3/4" (folded) 5lbs. 1oz.
110	Glaive	Staff weapon	Fauchard	Italy	L 16/E 17th c.	OSbin 5,left	Y	
1253	Glaive	Staff weapon		Central Europe	19th c.	OS bin 2,right	N	
1779	Glaive	Staff weapon		Europe	19th c.	OS bin 7,right	N	
792	Glaive	Staff weapon		Possibly Switzerland	L 16th/E 17th c	OSbin 7,center	Y	
1030	Halberd	Staff weapon		Germany (Munich)	1920-1929	OS bin 2,right	N	
1089	Halberd	Staff weapon		Germany	L 16/E 17th c.	OS bin 2,right	Y	

1093	Halberd	Staff weapon		Netherlands or North Germany	L 16/E 17th c.	OS bin 3,left	Y	
1095	Halberd	Staff weapon		Netherlands (?)	2nd qtr 17th c.	OS bin 3,left	Y	
1228	Halberd	Staff weapon		N. Netherlands (Dutch)	1625-50	OS bin 6,center	Y	
1270	Halberd	Staff weapon		Netherlands (?)	2nd qtr 17th c.	OSbin 3,left	Y	
1273	Halberd	Staff weapon		Germany	End of 16th c.	OS bin 2,left	Y	
1275	Halberd	Staff weapon		Germany (Saxony)	E 17th c.	OS bin 5,left	Y	
1366	Halberd	Staff weapon		Switzerland	L 17th/E 18th c	OS bin 3,left	Y	
1428	Halberd	Staff weapon		Italy	1st 1/4 17th c.	OS bin 3,center	Y	
1467	Halberd	Staff weapon		Austria (Pankraz Thaller of Hall)	1st 1/4 17th c.	OS bin 3,right	Y	
149	Halberd	Staff weapon		Austria	1st q. 17th c.	OSbin 2,right	Y	
1703	Halberd	Staff weapon		Netherlands or Germany	E 17th c.	OS bin 3,center	Y	
1704	Halberd	Staff weapon		Austria	L 16/E 17th c.	OS bin 3,center	Y	
1707	Halberd	Staff weapon		Netherlands ?	2nd 1/4 17th c.	OS bin 3,left	Y	
171	Halberd	Staff weapon		Austria (?)	L 16/E 17th c.	OSbin 3,center	Y	
1792	Halberd	Staff weapon		Austria, probably	L 16th c.	OS bin 4,center	Y	
1794	Halberd	Staff weapon		N. Germany ?	17th c.	OS bin 3,right	Y	
1798	Halberd	Staff weapon		Central Europe	L 17/E 18th c.	OS bin 3,center	Y	
2082.5	Halberd	Staff weapon		Germany or Austria	1st q. 17th c.	OS bin 3,center	Y	

2082.6	Halberd	Staff weapon		Europe	19th c.	OSbin 3,center	N	
2374	Halberd	Staff weapon		Europe	19th/20th c.	OS bin 6,left	N	
2469	Halberd	Staff weapon		Italy or France	L 16th c.	OS bin 7,center	Y	
2546.1	Halberd	Staff weapon		Italy	2nd 1/2 16th c.	OSbin 2,center	Y	
2546.16	Halberd	Staff weapon		Italy	2nd 1/2 16th c.	OSbin 2,center	Y	
2546.17	Halberd	Staff weapon		Italy	2nd 1/2 16th c.	OSbin 2,center	Y	
2546.18	Halberd	Staff weapon		Italy	1st q. 17th c.	OSbin 2,right	Y	
2546.5	Halberd	Staff weapon		Italy	L 16th c.	OSbin 3,center	Y	
2662	Halberd	Staff weapon		S. Germany (Bavaria)	17th c.	OSbin 2,left	Y	
2663	Halberd	Staff weapon		Probably Germany	1620-1623	OSbin 6,left	Y	
2664	Halberd	Staff weapon		Italy or the Netherlands	L 16/E 17th c.	OSbin 4,left	Y	
2666	Halberd	Staff weapon		Austria (Salzburg?)	L 16th/E 17th c	OSbin 2,left	Y	
2667	Halberd	Staff weapon		Italy	2nd 1/2 16th c.	OSbin 3,center	Y	
2682	Halberd	Staff weapon		Switzerland, Zurich	18th c.	OSbin 4,left	Y	
2693.1	Halberd	Staff weapon		Germany (?)	20th c.	OSbin 5,center	N	
2693.2	Halberd	Staff weapon		Probably Austria	L 16th/E 17th c	OSbin 6,right	Y	
2694	Halberd	Staff weapon		Switzerland, probably	2nd 1/2, 17th c	OSbin 4,center	Y	
2696	Halberd	Staff weapon		Central Europe	L 16th c.	OSbin 4,center	Y	

2928.1	Halberd	Staff weapon		N. Italy	16th c.	OSbin 5,right	Y	
2929.2	Halberd	Staff weapon		Germany, perhaps Switzerland	1st q. 16th c	OSbin 2,right	Y	
2959.1	Halberd	Staff weapon		France	ca. 1670-1700	OSbin 2,center	Y	
2963	Halberd	Staff weapon		Europe	style 17/18th c	OSbin 4,right	Y	
2966.1	Halberd	Staff weapon		Northern Italy	E 17th c.	OSbin 6,left	Y	
2966.2	Halberd	Staff weapon		Germany	E 17th c.	OSbin 2,center	Y	
2968.2	Halberd	Staff weapon		Dutch (?)	17th c.	OSbin 4,left	Y	
2968.3	Halberd	Staff weapon		Germany	early 17th c.	OSbin 2,left	Y	
3041.3	Halberd	Staff weapon		Germany or Austria	L 16/E 17th c.	OSbin 4,center	Y	
355	Halberd	Staff weapon		Europe	19th c.	OSbin 2,right	N	
42	Halberd	Staff weapon		Italy (?)	19th c.	OS bin 4,center	N	
437	Halberd	Staff weapon	'alabarda'	Spain	1789	OSbin 6, center	Y	
469	Halberd	Staff weapon		Dutch (?)	1625-50	OSbin 4,left	Y	
474	Halberd	Staff weapon		Austria	16th or 17th, c	OSbin 2,right	Y	
507	Halberd	Staff weapon		Italy	c. 1540	OS bin 6,left	Y	
508	Halberd	Staff weapon		N. Italy	E 17th c.	OS bin 6,left	Y	
511	Halberd	Staff weapon		Germany or Austria	1610-20	OS bin 3,right	Y	

512	Halberd	Staff weapon		France	ca. 1677-90	OS bin 3,right	Y	
513	Halberd	Staff weapon		Italy	2nd 1/2 16th c.	OS bin 3,right	Y	
598	Halberd	Staff weapon		Austria or Germany	1st qtr 17th c.	OSbin 3,right	Y	
599	Halberd	Staff weapon		Switzerland, Zurich	18th c.	OS bin 3,right	Y	
628	Halberd	Staff weapon		France	last qtr 17th c	OS bin 3,center	Y	
661	Halberd	Staff weapon		Italy	last qtr 16th c	OS bin 2,right	Y	
771	Halberd	Staff weapon		Switzerland	17th c.	OSbin 2,center	Y	
772	Halberd	Staff weapon		Central Europe (?)	L. 17th/E. 18th c.	3EA3	N	
83	Halberd	Staff weapon		Germany or Italy	last qtr 16th c	OSbin 2,left	Y	
859	Halberd	Staff weapon		Germany	1st q. 17th c.	OS bin 4,right	Y	
860	Halberd	Staff weapon		Germany	1st q. 17th c.	OS bin 2,right	Y	
861	Halberd	Staff weapon		Germany	1st q. 17th c.	OS bin 4,left	Y	
862	Halberd	Staff weapon		Germany	1st q. 17th c.	OS bin 5,left	Y	
963	Halberd	Staff weapon		Europe	17th c.	OSbin 7,center	Y	
966	Halberd	Staff weapon		Germany	1st q. 17th c.	OSbin 4,left	Y	
No#.20	Halberd	Staff weapon		Central Europe	L 16/E 17th c.	OSbin 2,left	Y	
No#.21	Halberd	Staff weapon		Austria	1st qtr 17th c.	OSbin 2,center	Y	
No#.23	Halberd	Staff weapon		Switzerland ?	14th c. ?	OSbin 3,left	Y	

3334	Halberd (head only)	Staff weapon		probably Germany	19th c.	OSbin 4,left	N	
No#.24	Halberd (head only)	Staff weapon		Probably Colonial America	18th c.	OSbin 3,right	Y	
2881.1	Lance	Staff weapon		Germany (?)	20th c.	OSbin 2,center	N	
2546.2	Langdebeve	Staff weapon	Ox-tongue	Italy	17th c. (?)	3WA4	N	
1159	Langue de boeuf	Staff weapon		Europe	16/17th c.	OSbin 5,left	Y	
2695	Langue de boeuf	Staff weapon		N. Italy	E 16th c.	OSbin 5,center	Y	
865	Langue de boeuf	Staff weapon		France	18th/19th c.	OS bin 5,left	Y	
No#.39	Langue de boeuf	Staff weapon		Italy, probably	E 16th c.	OSbin 5,left	Y	
2957	Linstock	Staff weapon	Artilleryman's spear	Italy	1570-1590	OSbin 4,center	Y	
1041	Linstock (head only)	Staff weapon		Germany (Munich)	1920-1929	OS bin 3,right	N	
1094	Military scythe	Staff weapon		Possibly Central Europe	17th - 19th c.	OS bin 7,center	Y	
964	Military scythe	Staff weapon		Central Europe, perhaps Germany	17th-19th c.	OSbin 7,center	Y	
1051	Partisan	Staff weapon		Germany (Munich)	1920-1929	OS bin 3,right	N	
109	Partisan	Staff weapon		Italy	last qtr 16th c	OSbin 2,right	Y	
1162	Partisan	Staff weapon		France	1715-20	OS bin 5,left	Y	
1171	Partisan	Staff weapon		Netherlands	2nd qtr 17th c.	OS bin 2,right	Y	
1177	Partisan	Staff weapon		Austria	18th c.	OS bin 3,left	Y	
1706	Partisan	Staff weapon		Germany (Augsburg ?)	E 17th c.	OS bin 7,right	Y	

1781	Partisan	Staff weapon		Italy	1st half 17th c.	OS bin 2,center	Y	
1791	Partisan	Staff weapon		Probably, Italy	16th c.	OS bin 4,right	Y	
1834	Partisan	Staff weapon		Italy	2nd 1/2 16th c	OS bin 5,center	Y	
2546.9	Partisan	Staff weapon		Italy	L 16th/E 17th c	OSbin 7,left	Y	
2657	Partisan	Staff weapon		Piedmont (Italy)	Ca. 1773	OSrolbin G9	Y	
2659	Partisan	Staff weapon		Germany	1620	OSbin 6,right	Y	
2683	Partisan	Staff weapon		Italy ?	L 17th c.	OSbin 6,left	Y	
2684	Partisan	Staff weapon		Germany	1620	OSbin 6,right	Y	
2968.1	Partisan	Staff weapon		Probably Italy	L 16th/E 17th c	OSbin 6,left	Y	
468	Partisan	Staff weapon		Italy	L 16th c.	OSbin 5,left	Y	
470	Partisan	Staff weapon		France (?)	17th c.	OSbin 6,center	Y	
488	Partisan	Staff weapon		Perhaps Holland	1660-70	OSbin 3,left	Y	
514	Partisan	Staff weapon		Saxony	ca. 1694-97	OS bin 2,left	Y	
965	Partisan	Staff weapon		Central or Eastern Europe	late 17/18th c.	OSbin 5,center	Y	
976	Partisan	Staff weapon		Probably Germany	1657?	OSbin 5,right	Y	
2882.5	Pike	Staff weapon		Germany or Austria	1st 1/2 17th c.	OSrolbin E11	Y	
972	Pike	Staff weapon		Central Europe	17th c.	OSbin 6,center	Y	
2774	Pike; retracting-blade	Staff weapon	Joe Brown pike; Georgia pike	Confederate States of America, Georgia	ca. 1862	OSbin 4,left	Y	

118	Rawcon	Staff weapon	Rancoon; ranseur	Possibly Italy	16th or 17th c.	OSbin 6,center	Y	
1789	Rawcon	Staff weapon		Italy	L 16th/E 17th c	OS bin 7,right	Y	
2546.12	Runka	Staff weapon		Italy	16th c.	OSbin 3,right	Y	
No#.22	Runka	Staff weapon	Friuli spear	Northern Italy	L 16/E 17th c.	OSbin 2,center	Y	
1054	Scythe	Staff weapon		Germany (?)	18th c.	OSbin 2,left	Y	
3128.2	Scythe	Staff weapon		Germany	17th c.	OSbin 5,left	Y	
3129.2	Scythe; military	Staff weapon		Germany (?)	18th c. ?	OSbin 6,right	Y	
626	Scythe; military	Staff weapon		Europe	17th/18th c.	OS bin 6,right	Y	
1161	Spear	Staff weapon		India or perhaps China	19th c.	OS bin 7,right	Y	
1179	Spear	Staff weapon		Austria (?)	19th c.	OS bin 5,left	Y	
1479	Spear	Staff weapon		Thailand or Burma	19th c.	OS bin 3,left	Y	
1835	Spear	Staff weapon		N. China	19th c.	OS bin 3,left	Y	
2436.1	Spear	Staff weapon	Langdebeve	Italy	1st half 16th c	OS bin 3,center	Y	
2472	Spear	Staff weapon		Probably India	E 19th c.	OS bin 5,center	Y	
2474	Spear	Staff weapon		Indo-Persia	18th/19th c.	OS bin 3,center	Y	
57	Spear	Staff weapon		Head only - N. China	19th c.	OSbin 7,right	Y	
72	Spear	Staff weapon	Hippe	Germany (Munich)	L 19/E 20th c.	OSbin 2,left	N	
77	Spear	Staff weapon		India or Persia	19th c.	OSbin 7,center	Y	

863	Spear	Staff weapon		China	19th c.	OSbin 7,right	Y	
867	Spear	Staff weapon		Probably, W. Europe	18th or 19th c.	OS bin 5,left	Y	
No#.51	Spear	Staff weapon		Europe or United States	19th c.	OSbin 7,center	N	
1427	Spear (head only)	Staff weapon		Persia ?	19th c.	OS bin 6,center	Y	
2105	Spear (head only)	Staff weapon		India (?)	E 19th c. (?)	OS bin 6,center	Y	
3354	Spear (head only)	Staff weapon		Probably India	19th c.	OSbin 5,center	Y	
3607	Spear (head only)	Staff weapon		Persia	19th c.	OSbin 6,center	Y	
59	Spear (head only)	Staff weapon		India (?)	19th c.	OSbin 6,center	Y	
3609	Spear (head)	Staff weapon		Persia	19th c.	OSbin 6,center	Y	
1796	Spear; Friuli	Staff weapon		Probably Italy	L 16th/E 17th c	OS bin 6,center	Y	
3128.1	Spear; hunting ?	Staff weapon		Germany (?)	19th c.	OSbin 7,center	Y	
1163	Spear; lugged	Staff weapon		Italy	19/20th c.	OS bin 6,center	N	
1780	Spear; lugged	Staff weapon	Partisan, Langue de boeue	Italy	L 16/E 17th c.	OS bin 2,left	Y	
1795	Spear; lugged	Staff weapon		Europe	16th c.	OS bin 6,center	Y	
3065.3	Spear; lugged	Staff weapon		Italy (?)	perhaps 17th c.	OSbin 4,center	Y	
3129.3	Spear; lugged	Staff weapon		Italy	1st 1/2 16th c.	OSbin 3,left	Y	
496	Spear; lugged	Staff weapon		Europe	17/18th c.	OS bin 2,right	Y	

1029	Spear; possibly standard head	Staff weapon		Europe (Possibly Germany, Munich)	20th c. ?	OS bin 6,right	N	
627	Spear; trench	Staff weapon		Probably Colonial America	ca. 1775	OS bin 6,right	Y	
664	Spear; trench	Staff weapon		Colonial America	ca. 1776-83	OS bin 3,left	Y	
1165	Spontoon	Staff weapon		Italy	L 16th/E 17th c	OS bin 6,left	Y	
1269	Spontoon	Staff weapon	Kurzwgehr	Prussia	2nd 1/4 18th	OS bin 5,right	Y	
188	Spontoon	Staff weapon		Austria	1st 1/2 18th c.	OSbin 5,right	Y	
1981	Spontoon	Staff weapon		Central Europe, possibly Austria	17th/18th c.	OS bin 7,left	Y	
1982	Spontoon	Staff weapon	Kurzwgehr	Germany (Saxony ?)	1st 1/2 18th c.	OS rolbin E1	Y	
3034.1	Spontoon	Staff weapon		Prussia	2nd q. 18th c	OSbin 6,right	Y	
497	Spontoon	Staff weapon		Central Europe (probalby Austria)	2nd 1/2 18th c.	OSbin 5,right	Y	
660	Spontoon	Staff weapon		Italy	16th/17th c.	OSbin 5,right	Y	
No#.119	Spontoon	Staff weapon		Britain	2nd 1/2 18th c.	OSbin 6,left	Y	
2219	Trident	Staff weapon		N. China	19th c.	OSbin 3,right	Y	
2671	Trident	Staff weapon		Probably Italy	16th c.	OSbin 6,right	Y	
	Tools							
2832	Adze	Tools & implements		Philippines (?)	E 20th c.	OSJ3	N	
3129.1	Axe	Tools & implements	Doloire	Germany, Suhl	17th c.	OSbin 6,center	Y	

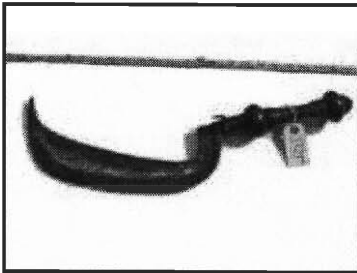
2649	Brace; orthopedic	Tools & implements		Perhaps France	2nd q 18th c	NS A19	N	
1838	Dagger; Bull fighter's	Tools & implements		Spain	19th c.	OS B16	N	
2747.1	Sword; execution	Tools & implements	Panabas	Philippines (Moro people)	20th c.	OSD16	N	32 1/2" across back

Appendix D

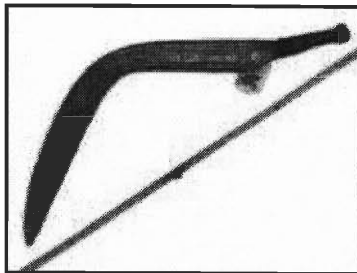
The Pictures

African Throwing Knives

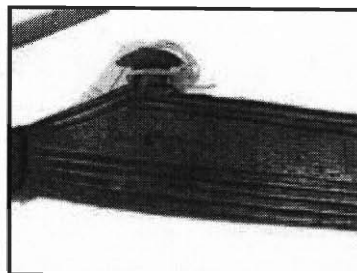
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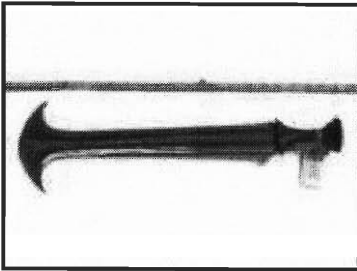
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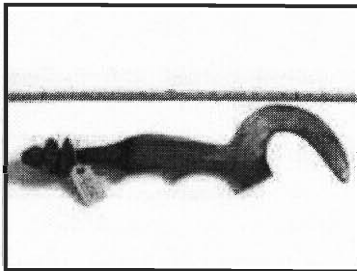
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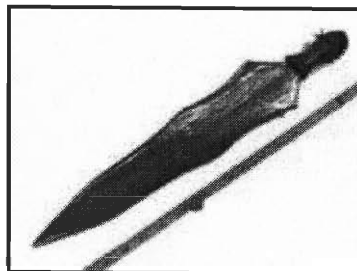
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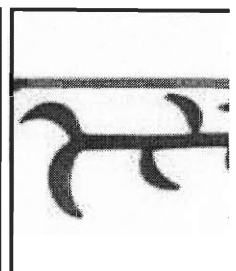
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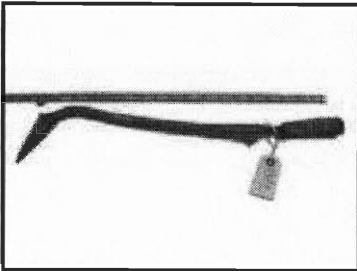
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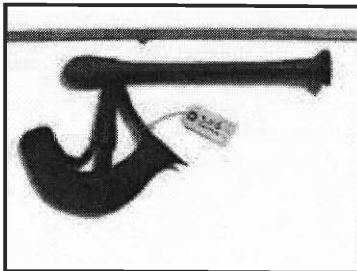
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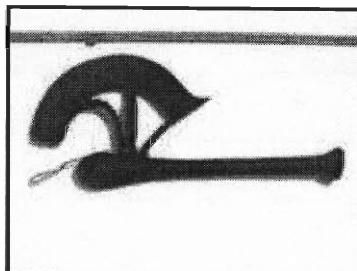
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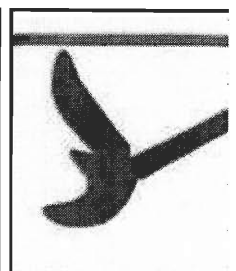
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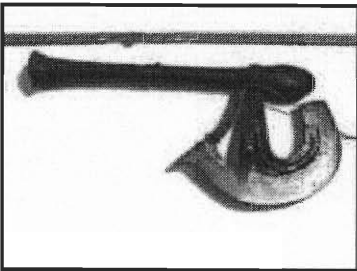
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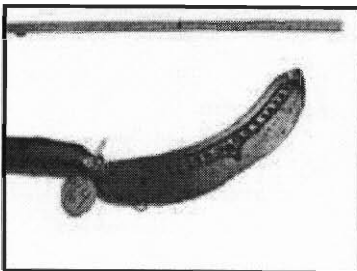
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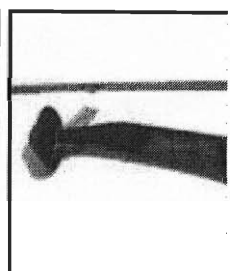
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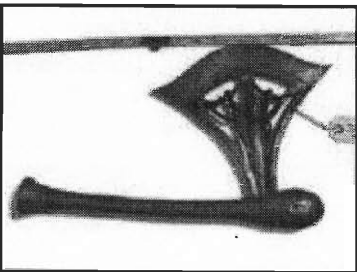
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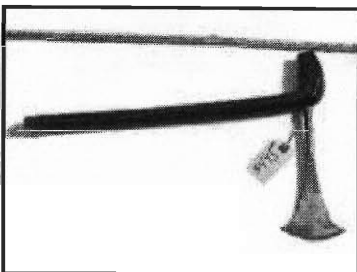
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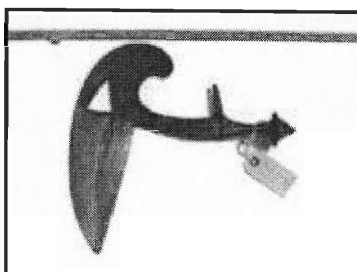
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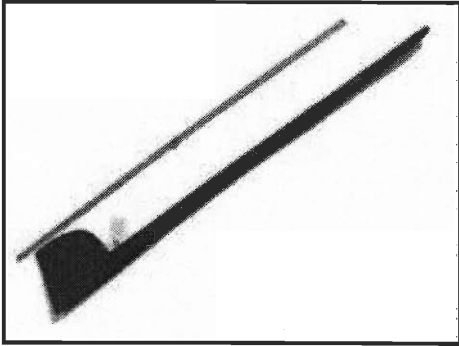


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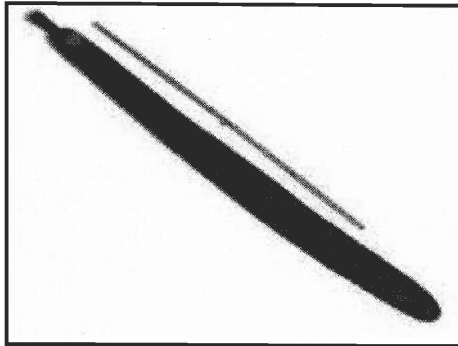


Australian Wooden Clubs

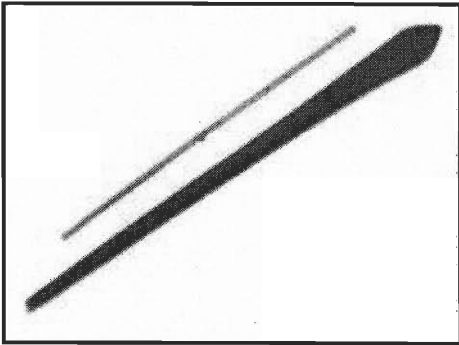
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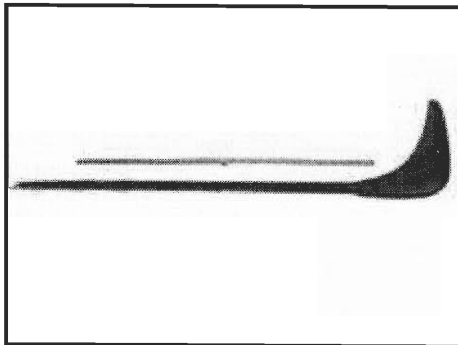
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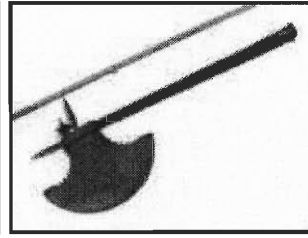
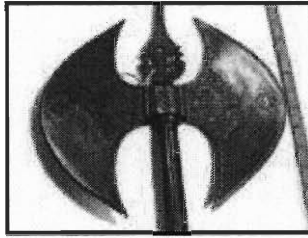
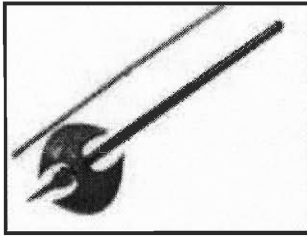
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Axes
1842

1842

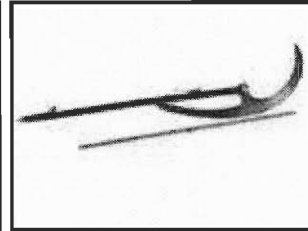
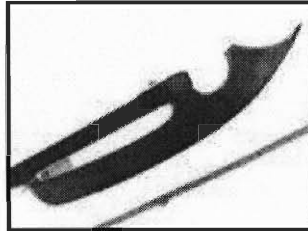
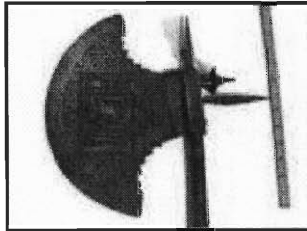
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2818

2960.1

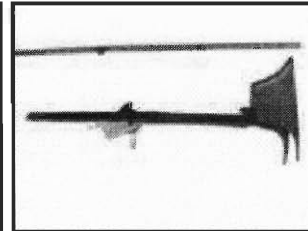
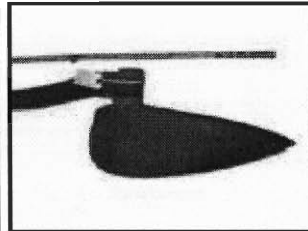
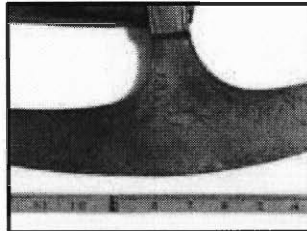
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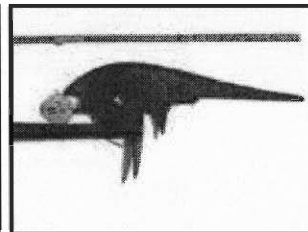
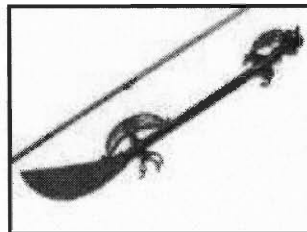
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3143.7



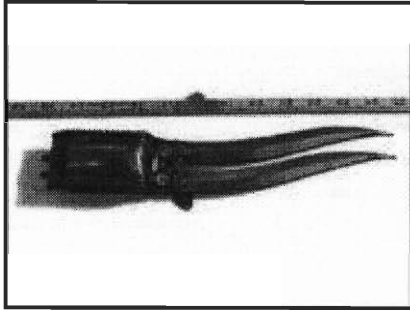
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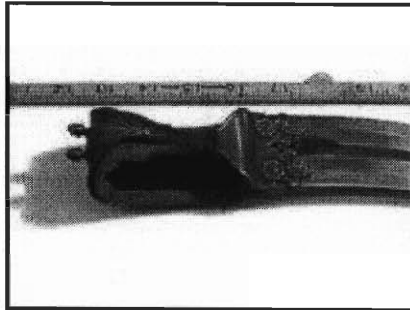


Bichwa

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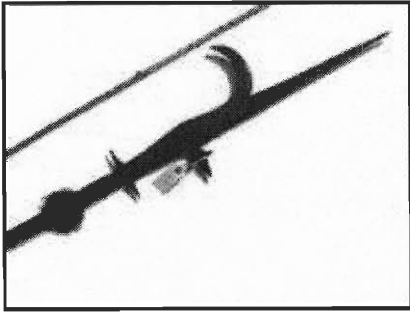


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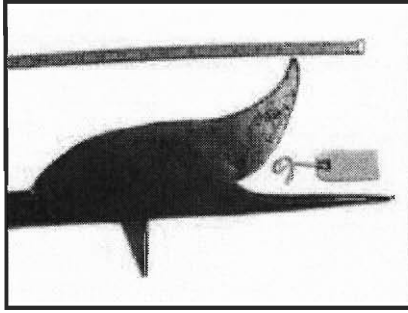


Bills
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408

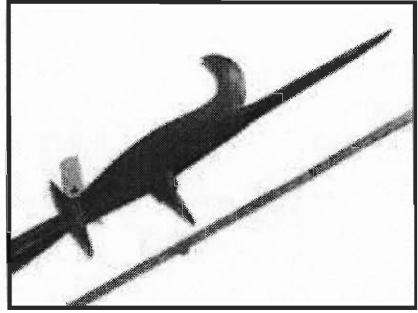


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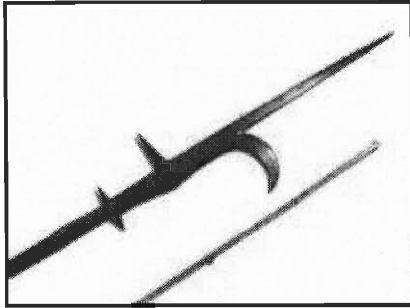


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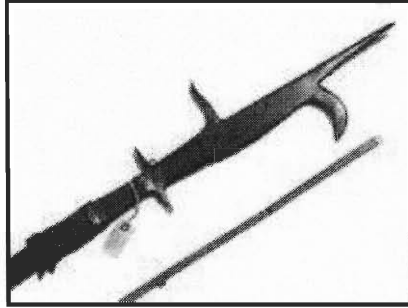
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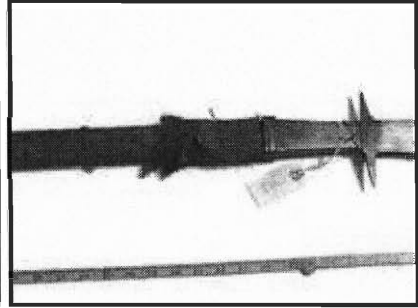
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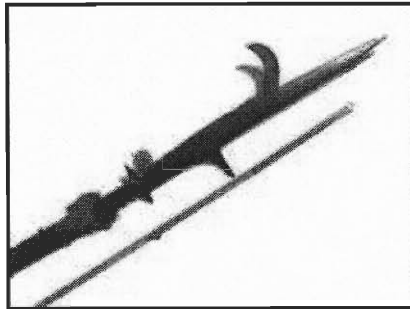
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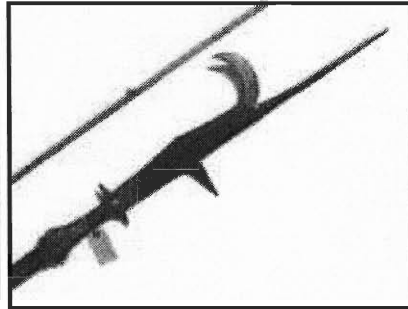
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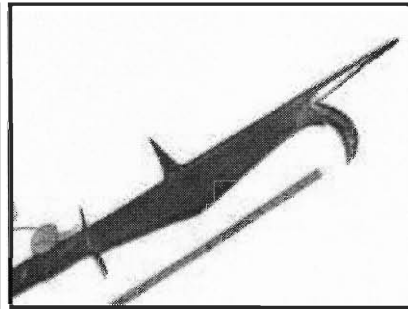
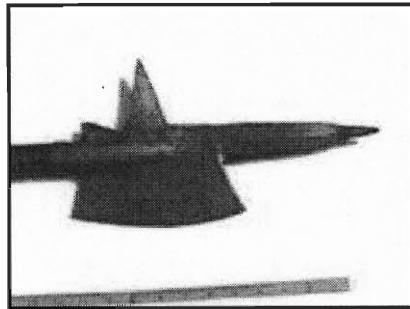
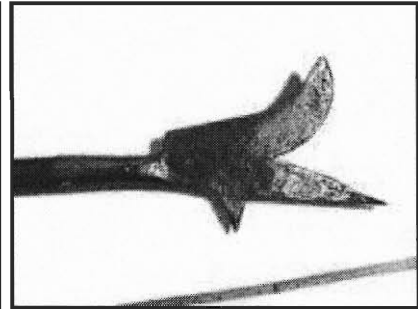
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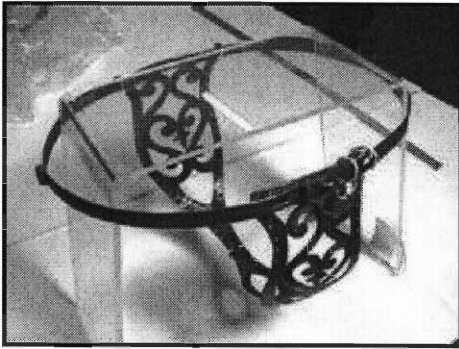


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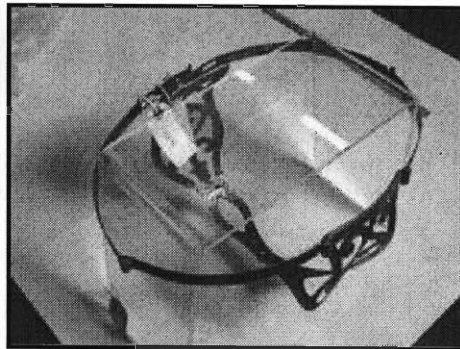


Chastity Belts

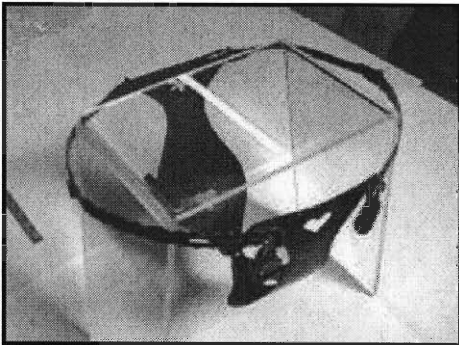
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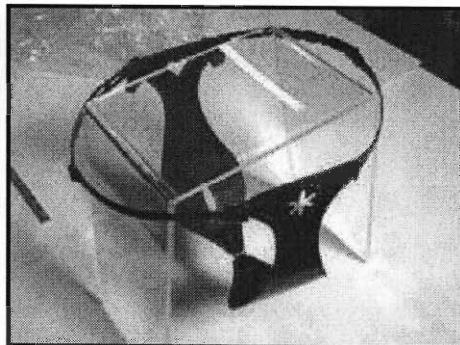
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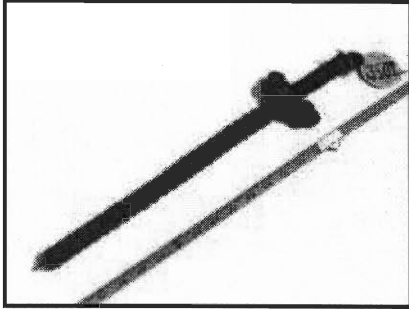


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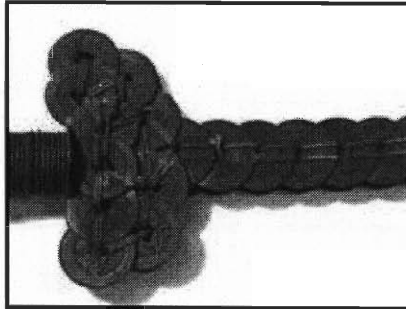


Coin Sword

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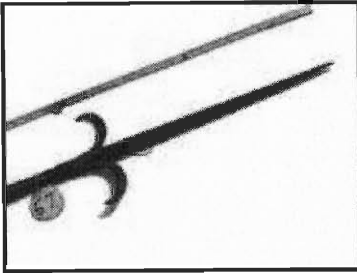


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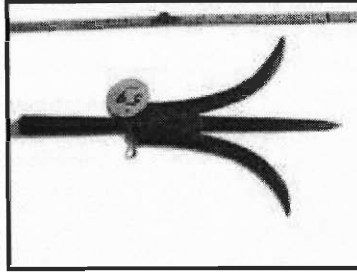
Corsesca

57



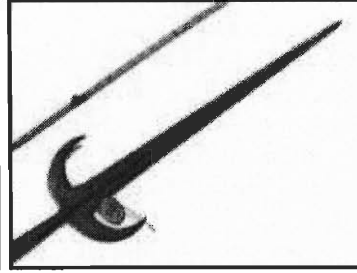
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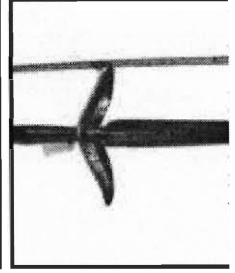
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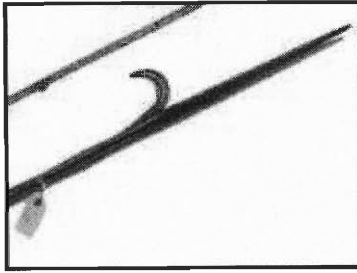


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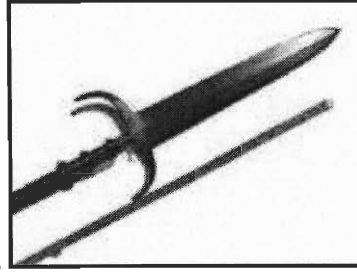
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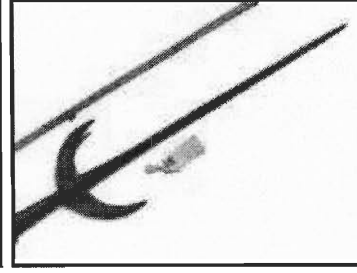
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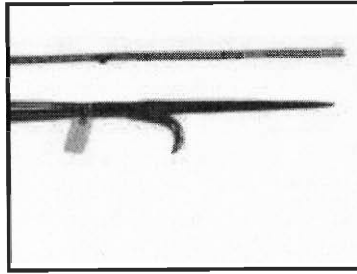
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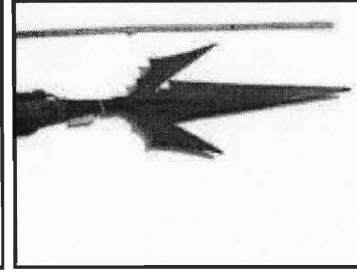
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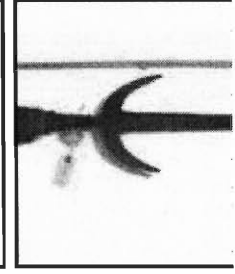
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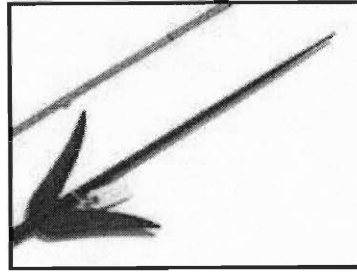
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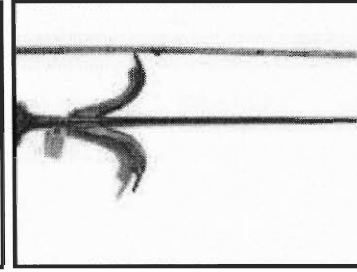
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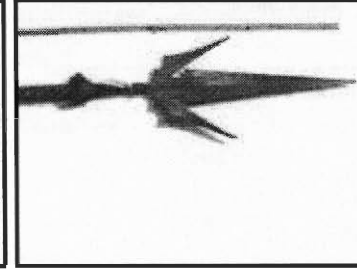
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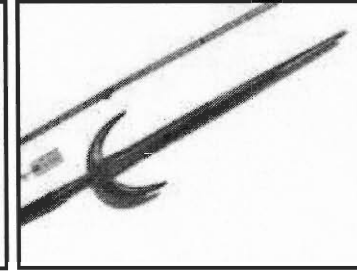
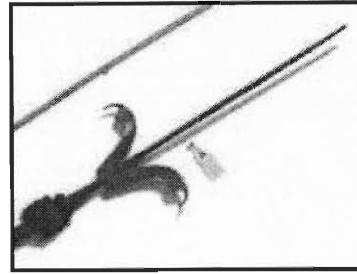
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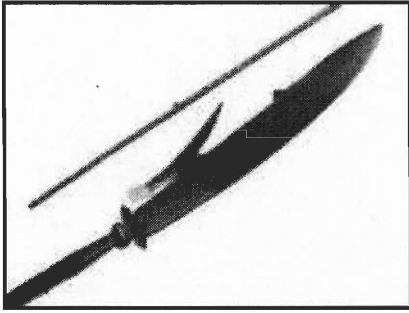


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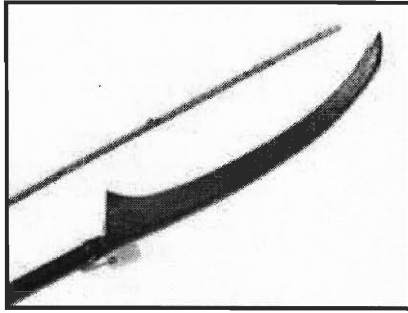


Glaives and Scythes

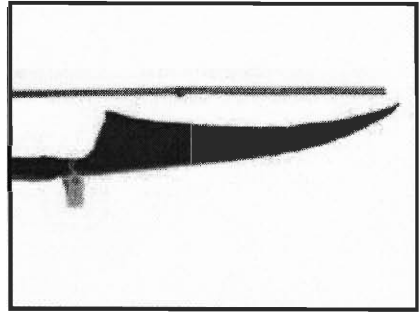
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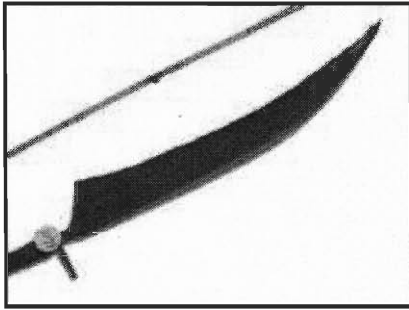
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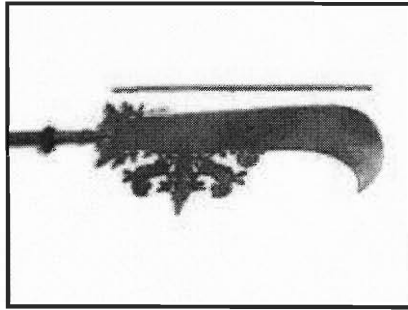
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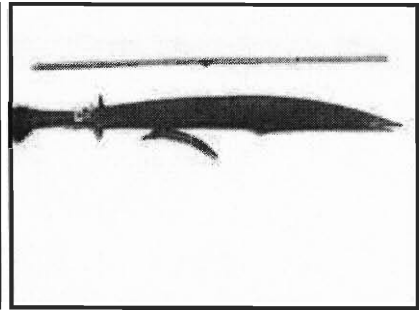
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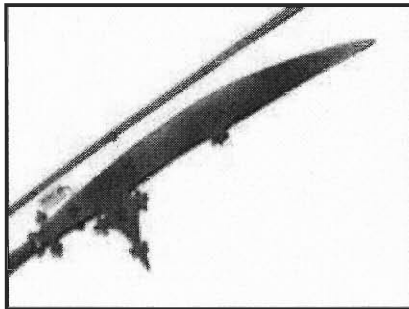
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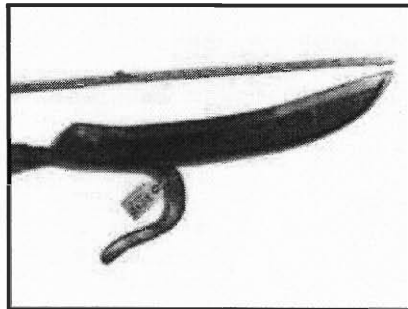
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3601.1

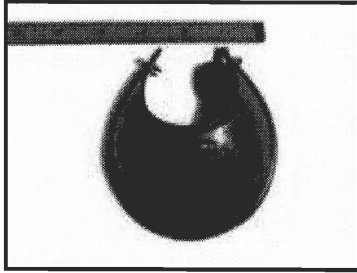


3129.2

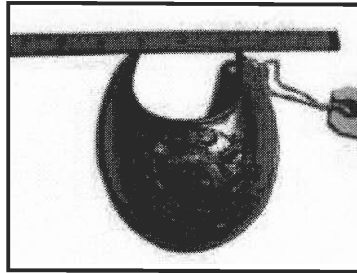


Gorget

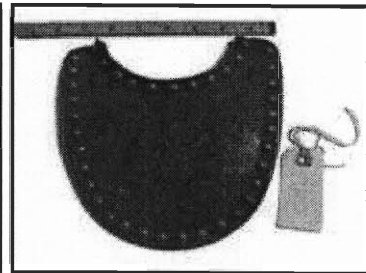
368



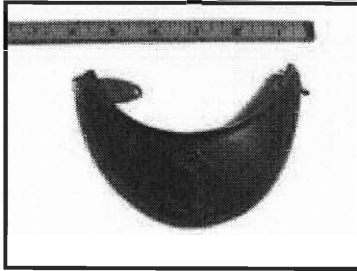
420



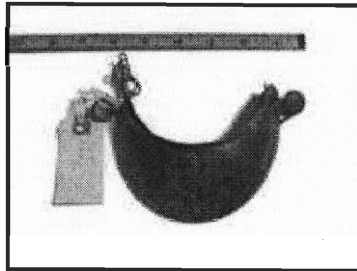
980



3526

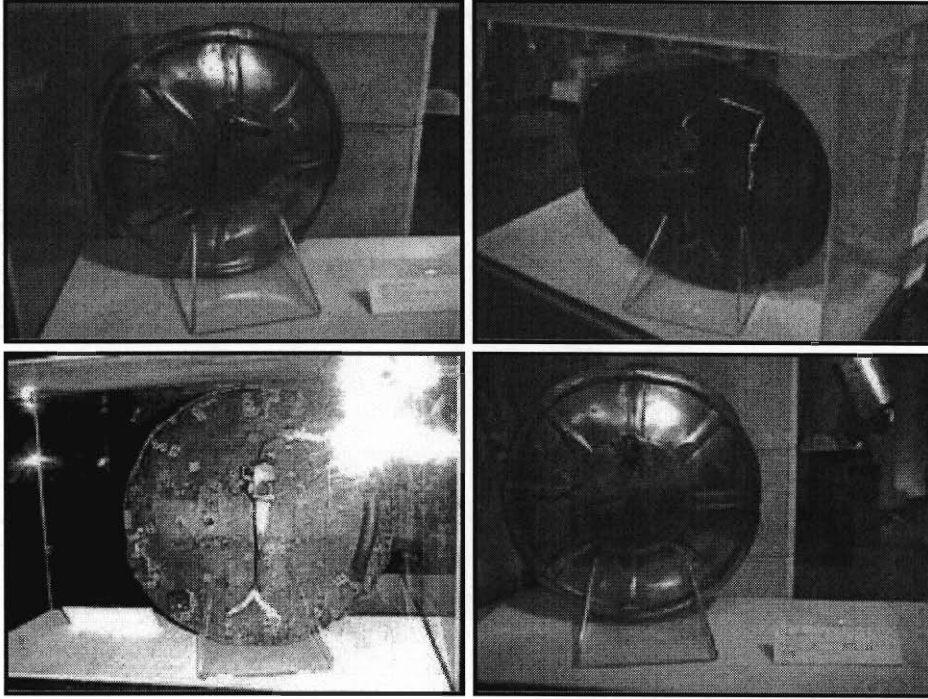


No # 222



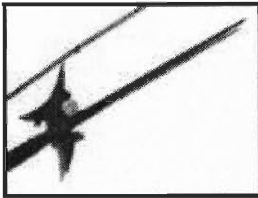
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2533

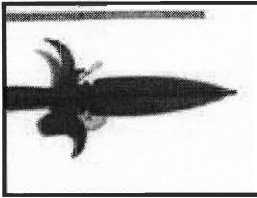


Halberds

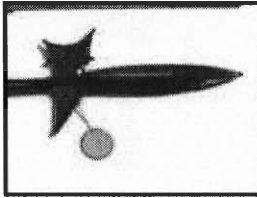
83



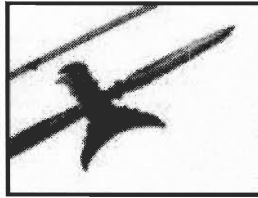
149



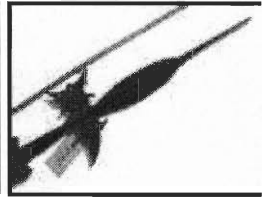
171



437



474



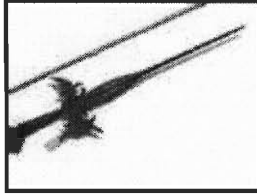
507



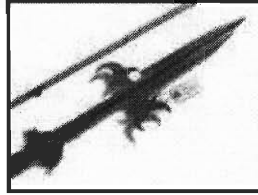
508



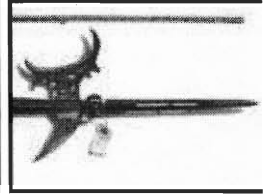
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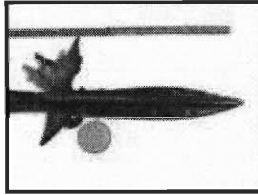
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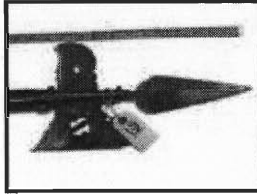
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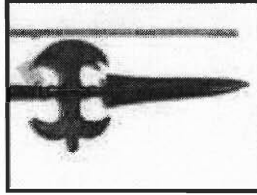
598



599



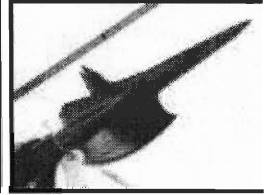
628



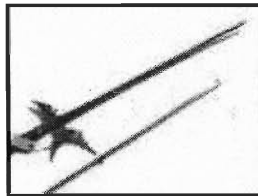
661



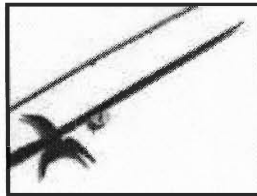
771



856



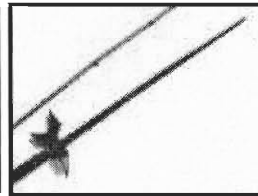
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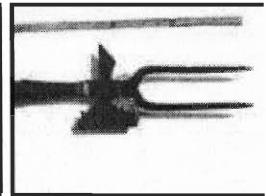
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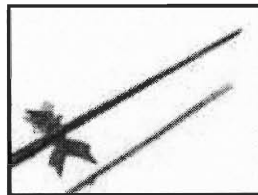
862



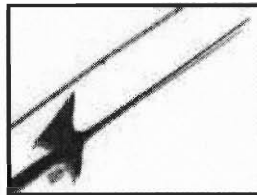
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966



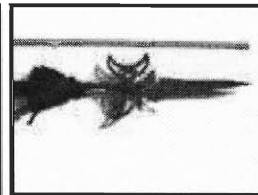
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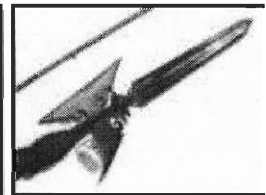
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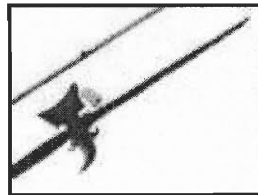
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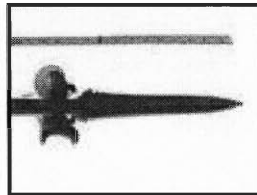
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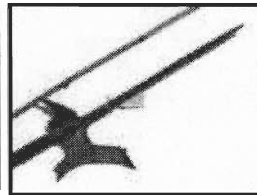
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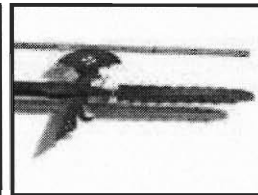
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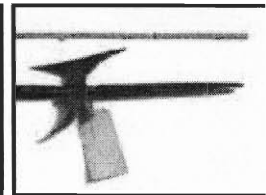
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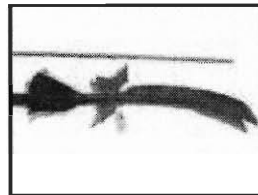
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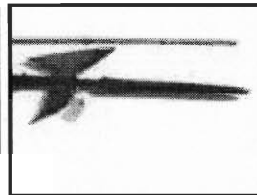
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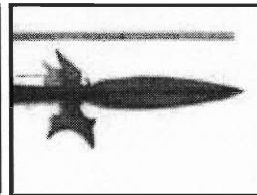
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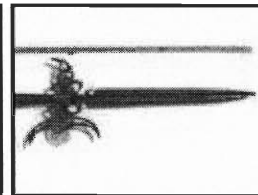
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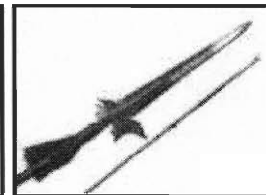
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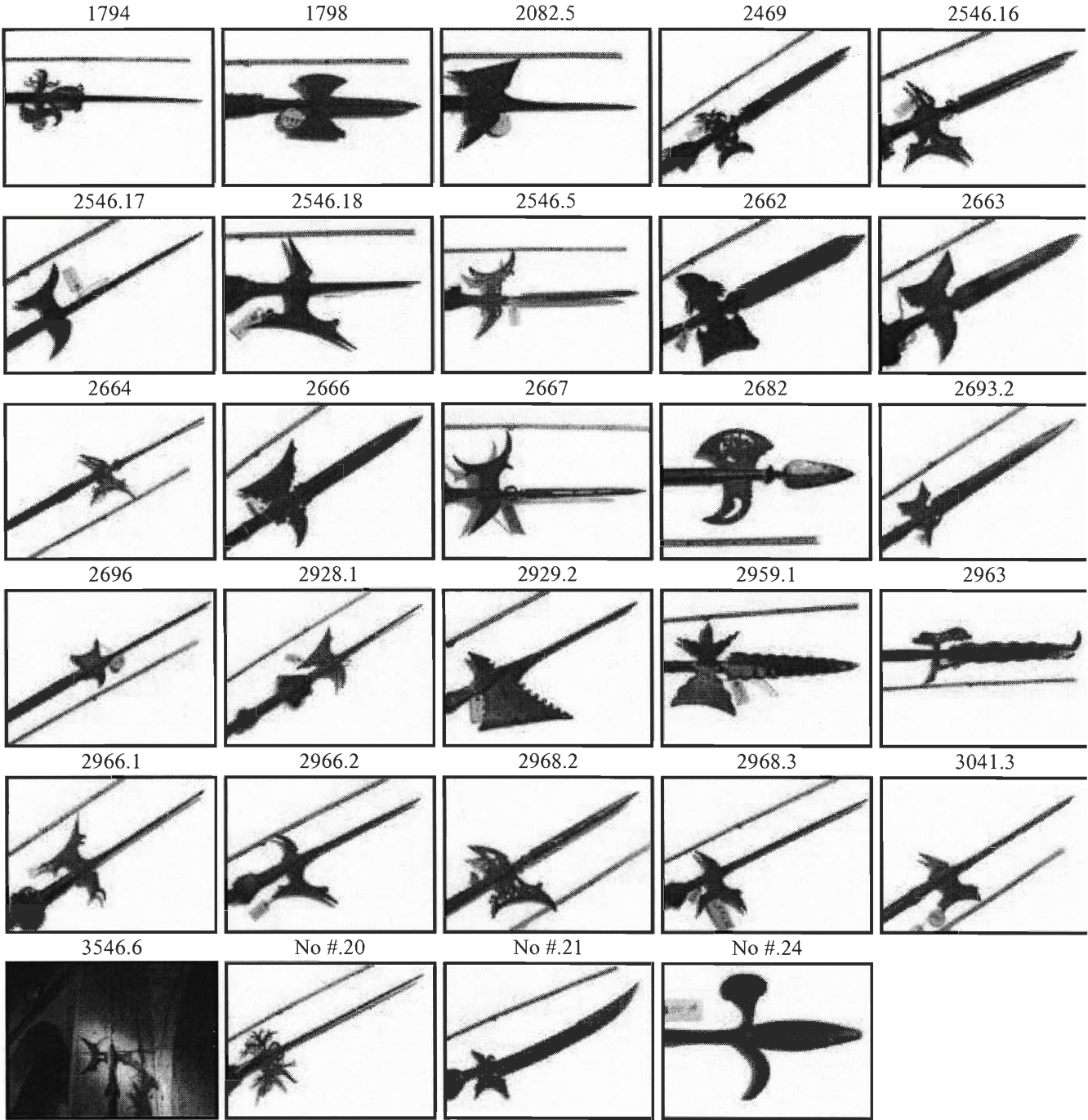


1707



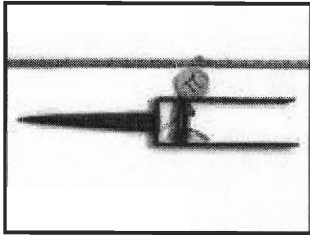
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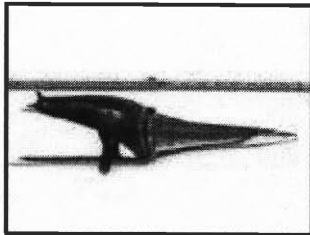
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21.a



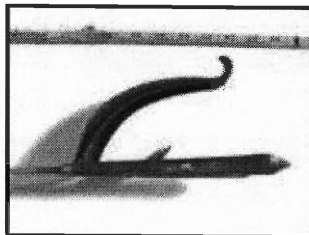
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22



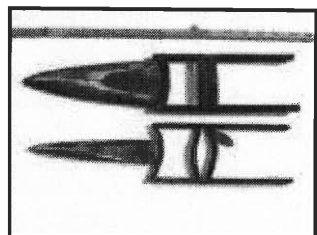
88

22

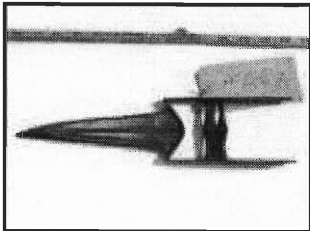


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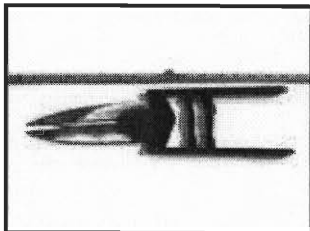
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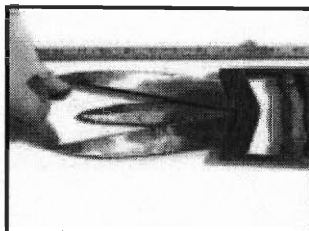
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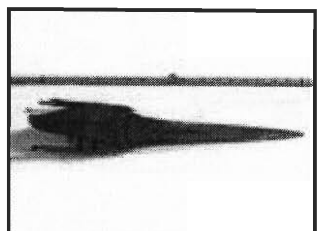
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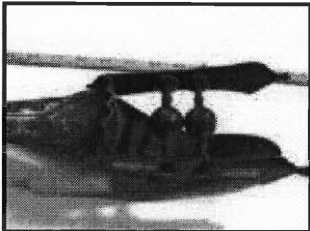
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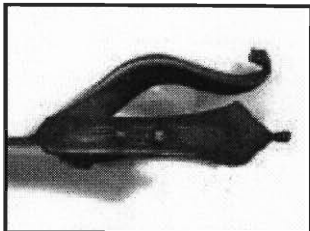
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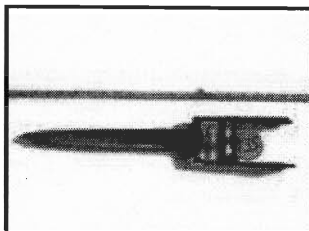
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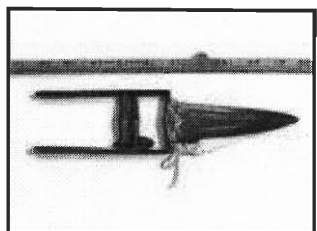
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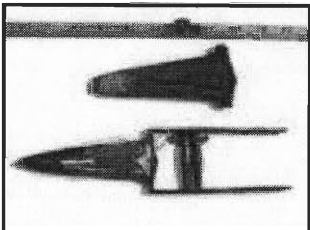
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1550



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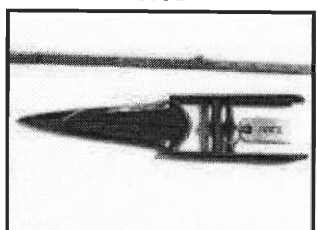
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1553



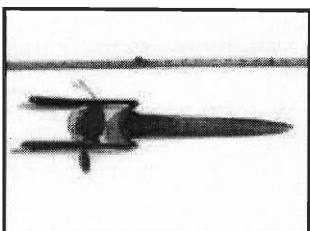
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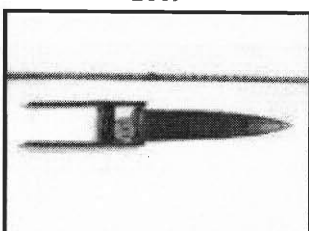
2391



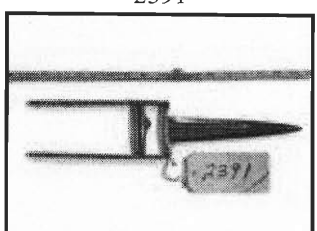
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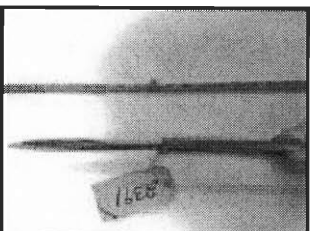
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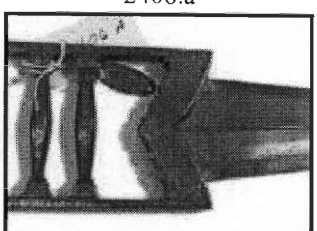
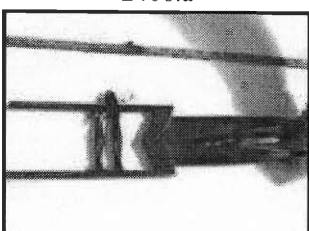
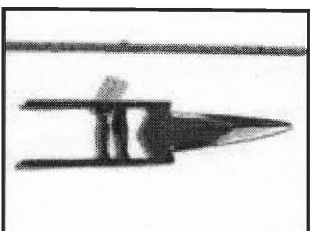
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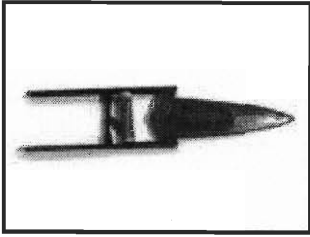
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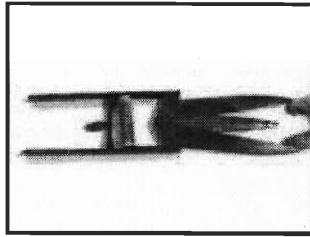
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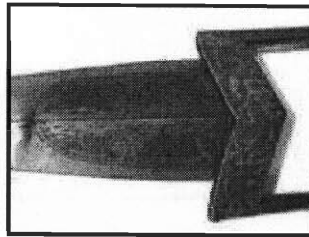
3651



3651

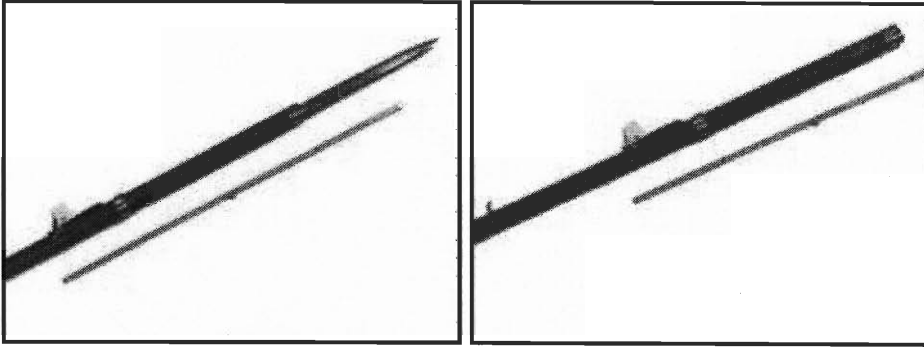


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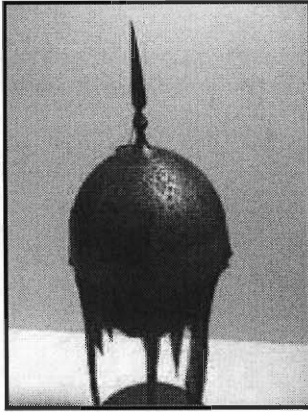
The Joe Brown Pike

2774

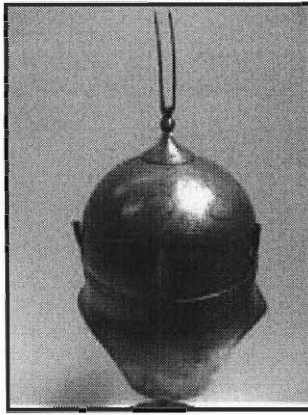


Kulah Khud Helmets

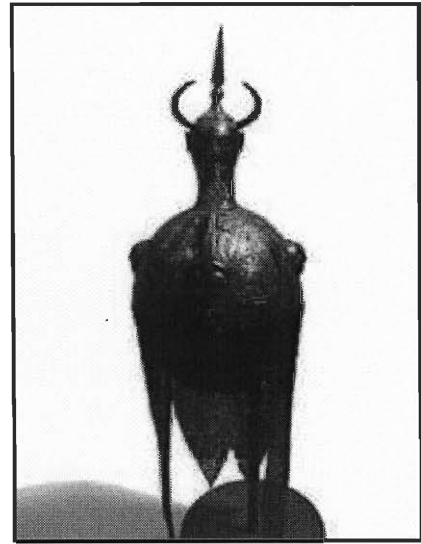
231



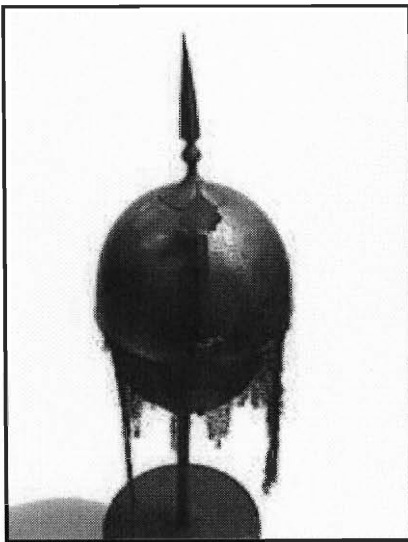
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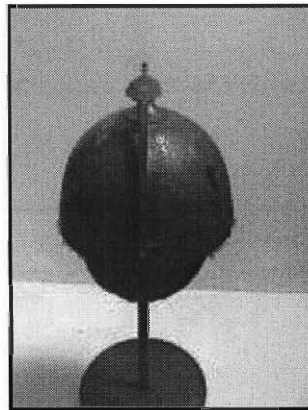
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2971



2974.3



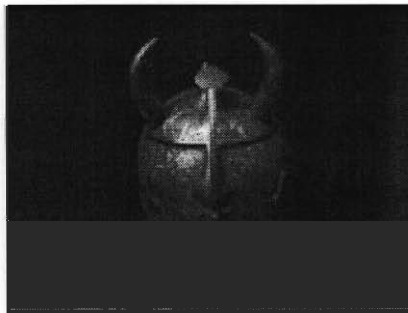
3091.4



3092.8

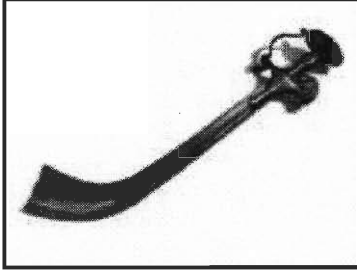


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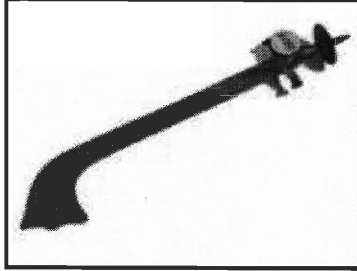
Koras

304.a



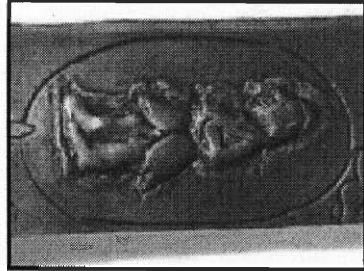
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2050

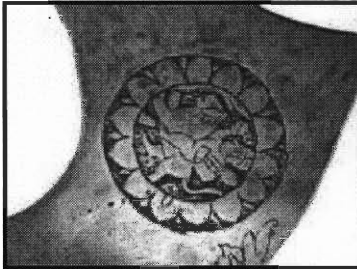


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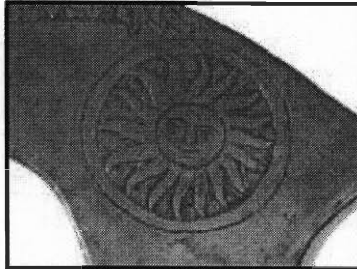
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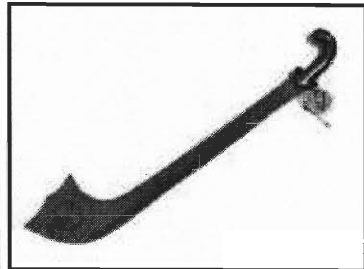
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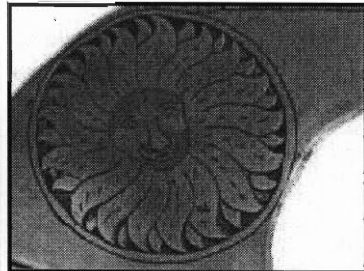
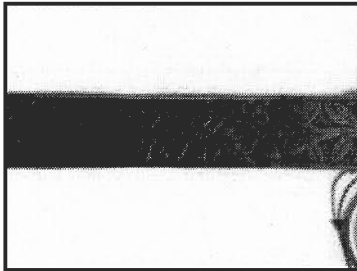
2179



2179

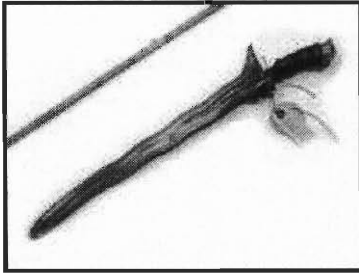


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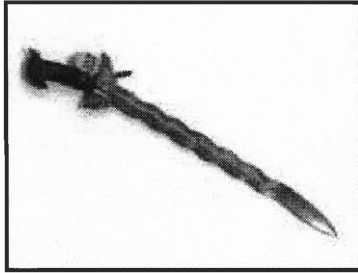


Kris Knives

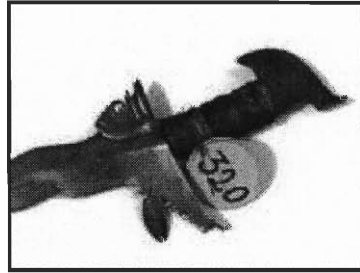
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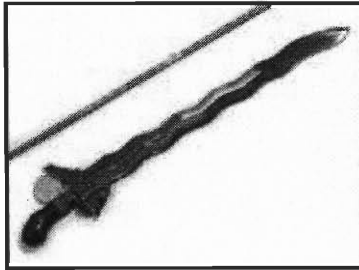
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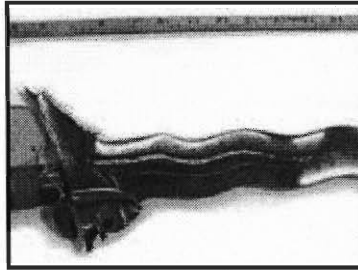
320-2



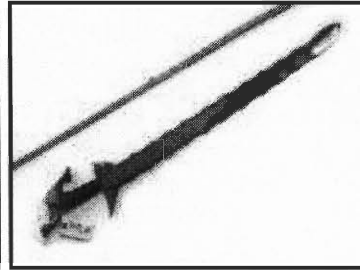
2289-1



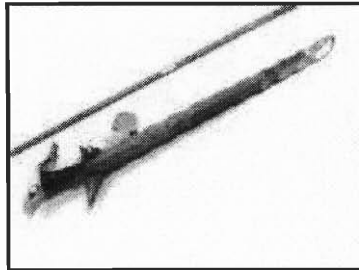
2289-2



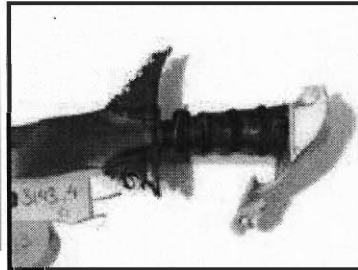
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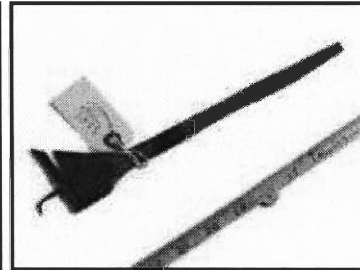
3143.4-1



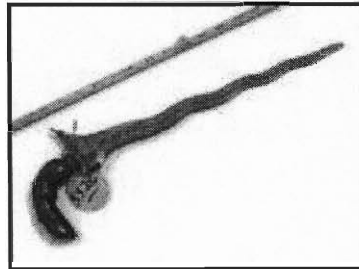
3143.4-2



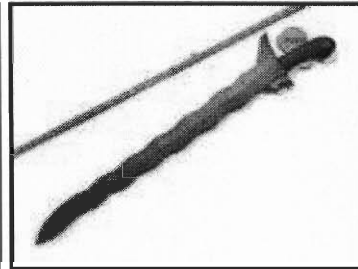
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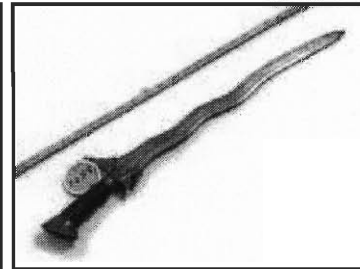
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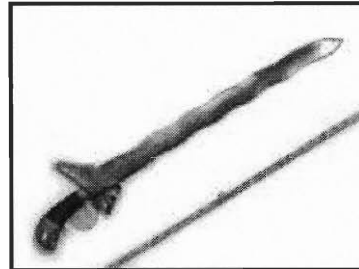
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3591

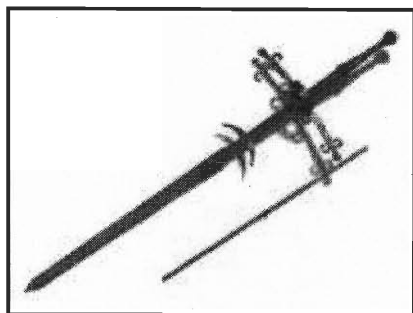


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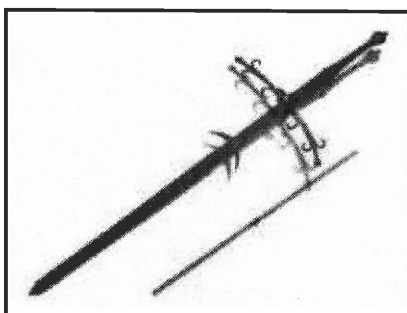


Two Handed Swords

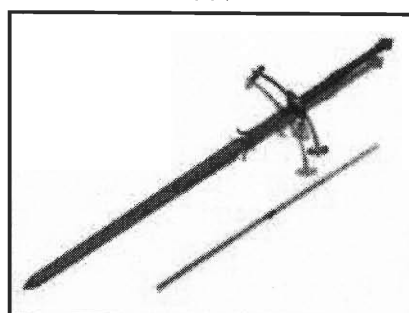
2964.1



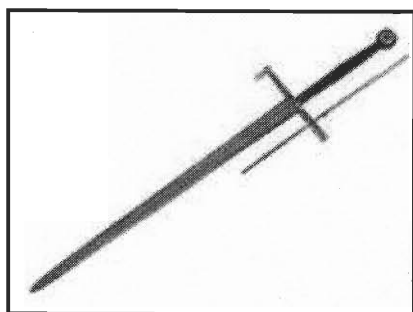
666



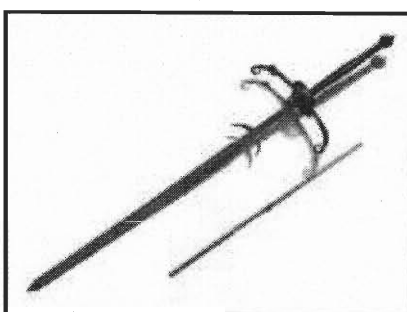
667



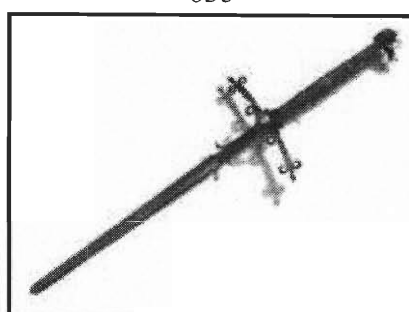
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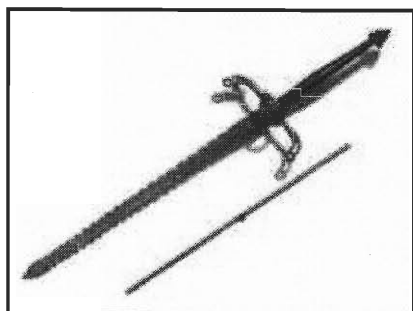
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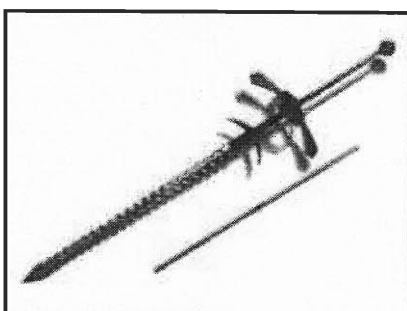
635



3132.2

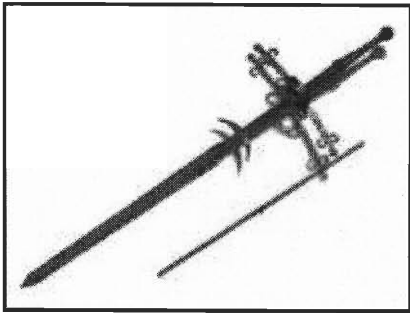


3462

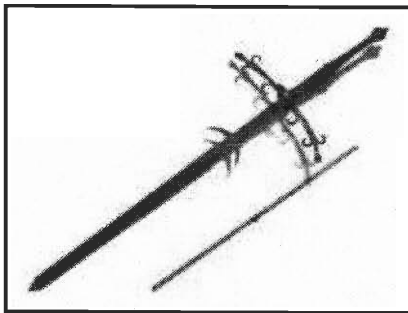


Two Handed Swords

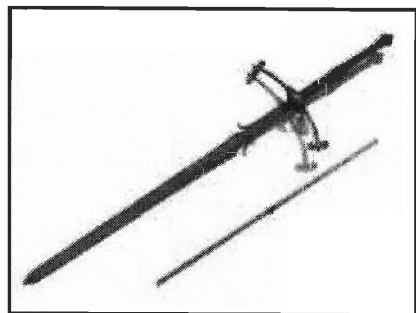
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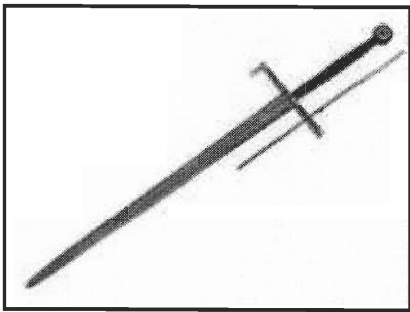
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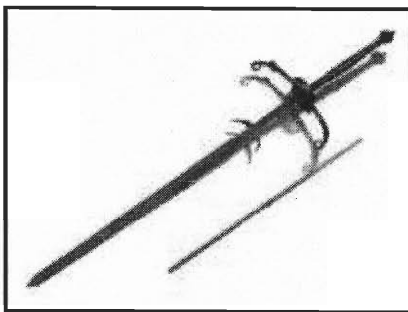
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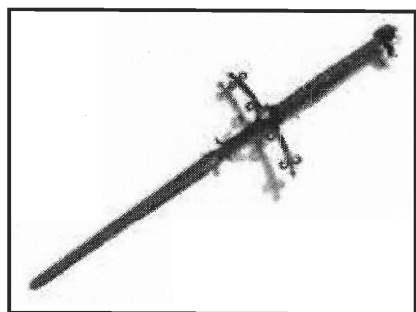
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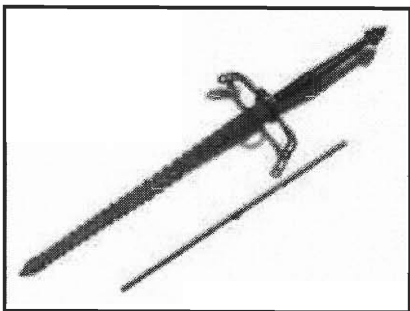
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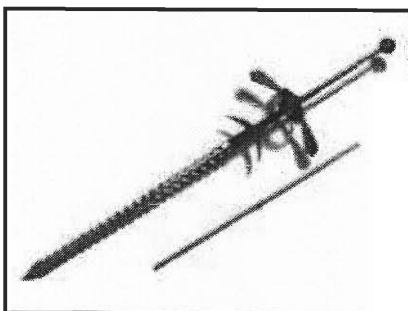
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3132.2

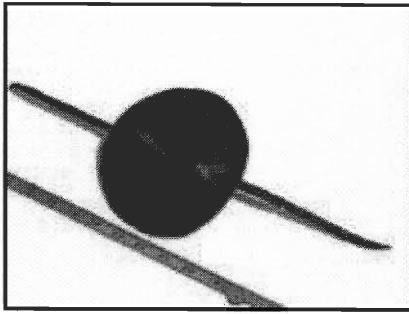


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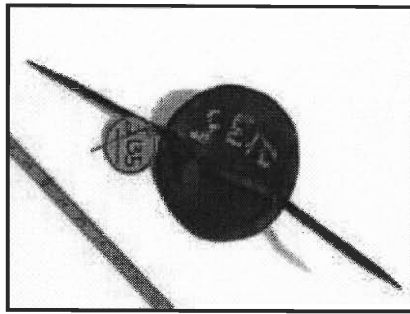


Maru

2153-1



2135-2

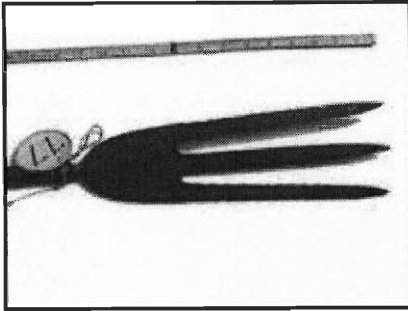


Military Forks, Tridents, etc.

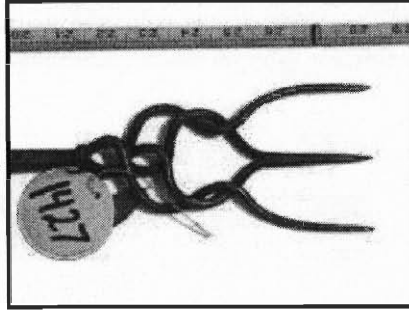
77

1427

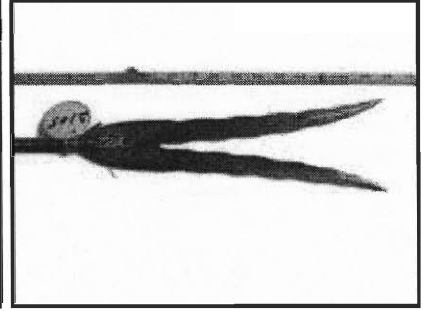
2501-1



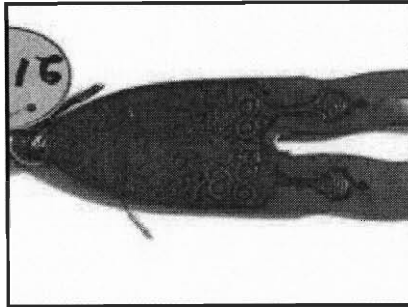
2501-2



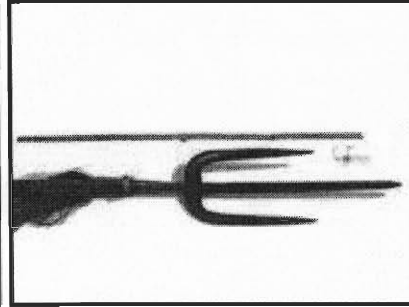
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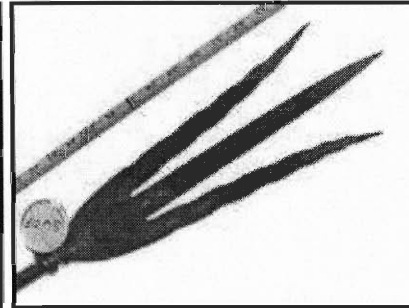
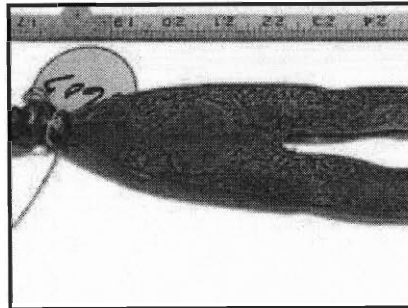
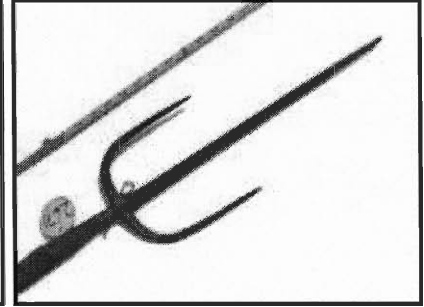
2671



3607-2

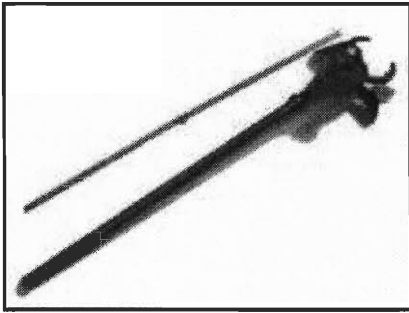


3609-1



Parade Maces

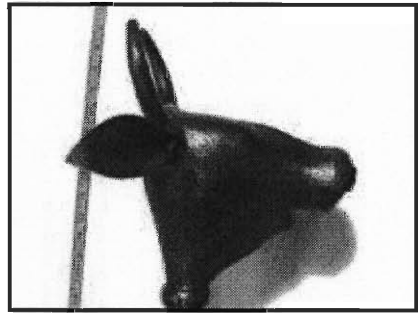
2102-1



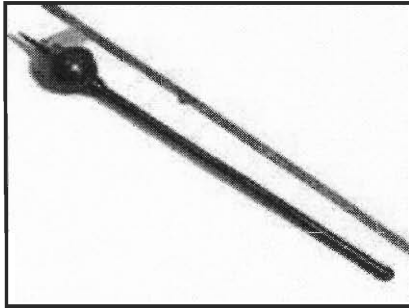
2102-2



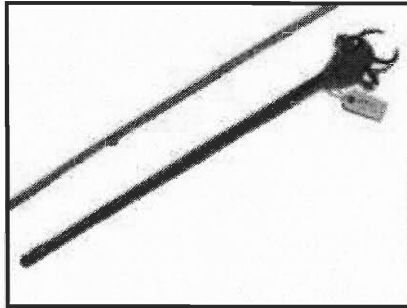
2102-3



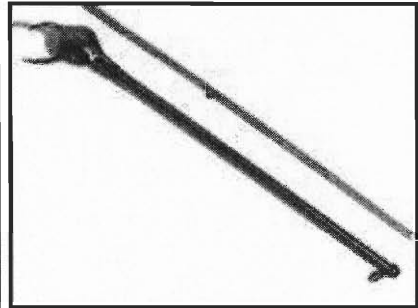
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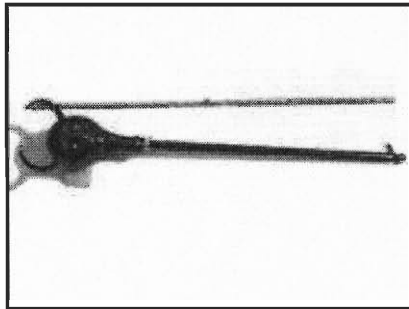
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2822



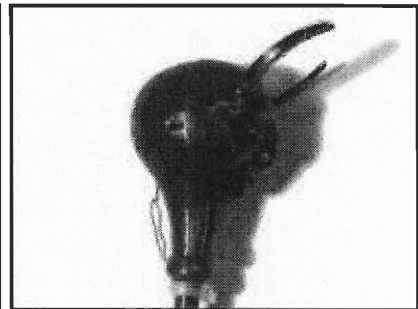
3029-1



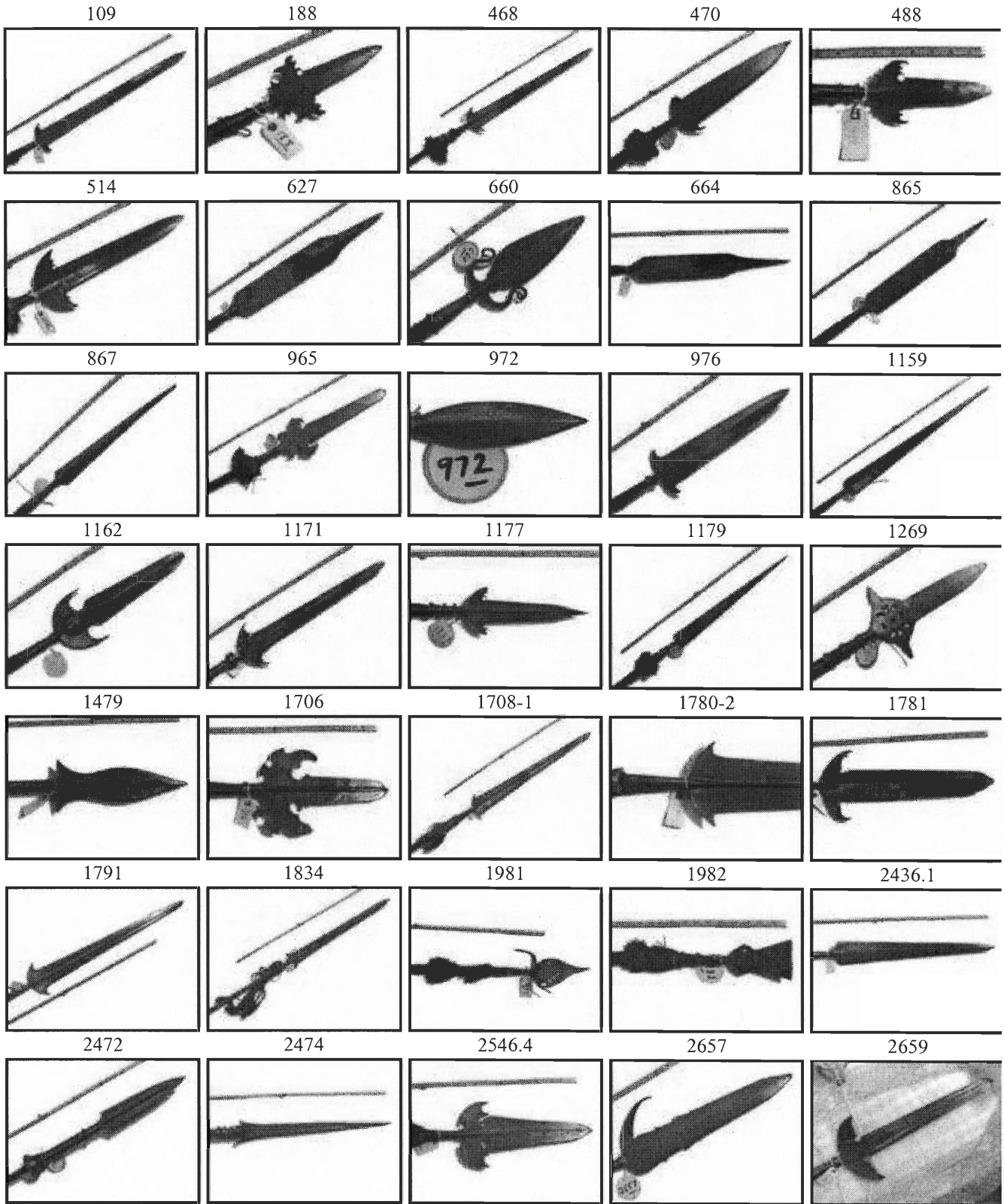
3029-2



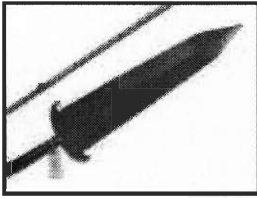
3029-3



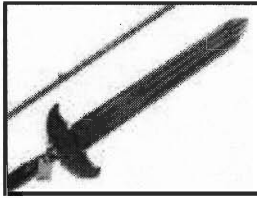
Partisans, Spears, Langdebeves, etc.



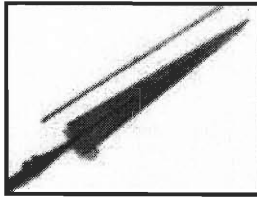
2683



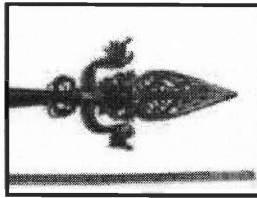
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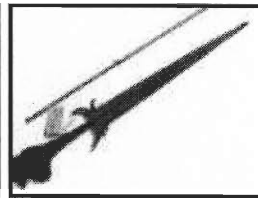
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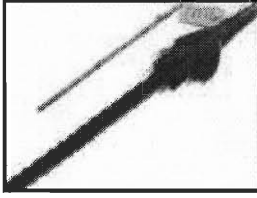
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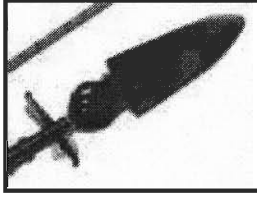
2968.1-1



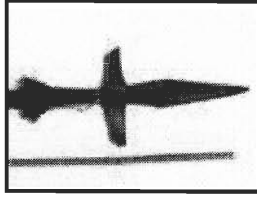
2968.1-2



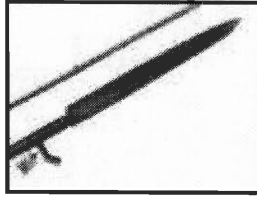
3038



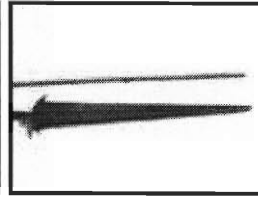
3065.3



3128.2



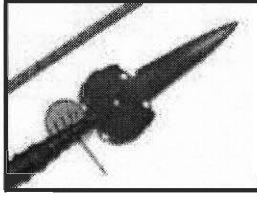
3129.3



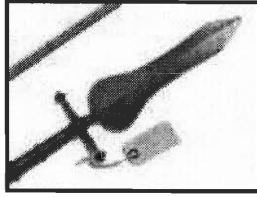
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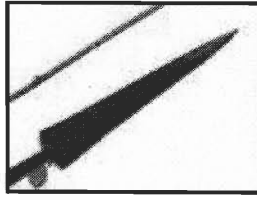
497



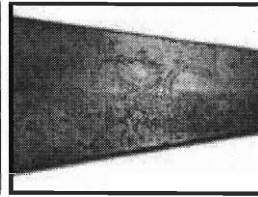
No #119



No # 39-1



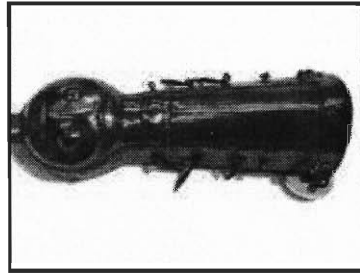
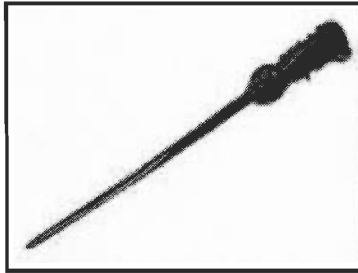
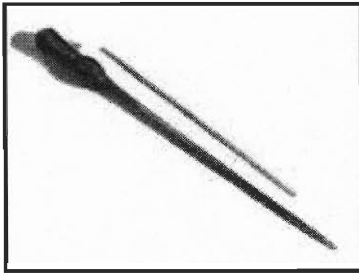
No #39-2



Pattas
2061-1

1549

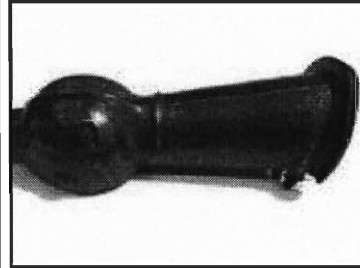
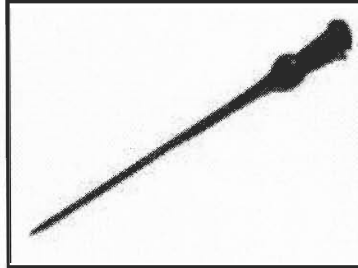
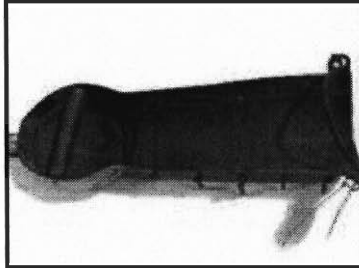
2061-2



2061-3

2221-1

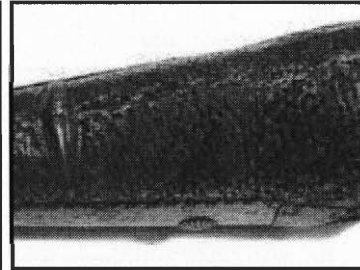
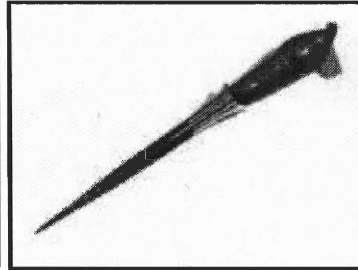
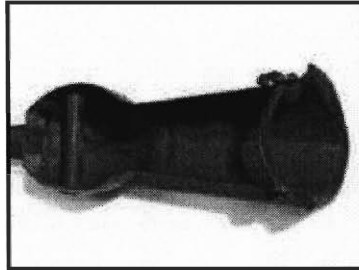
2221-2



2221-3

2418-1

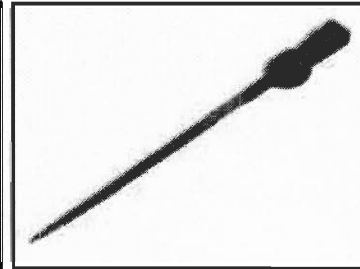
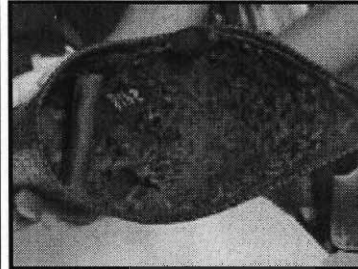
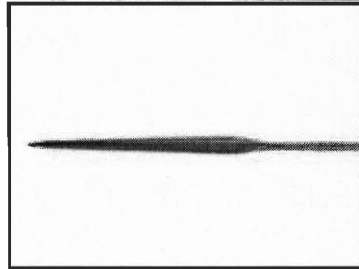
2418-2



2418-3

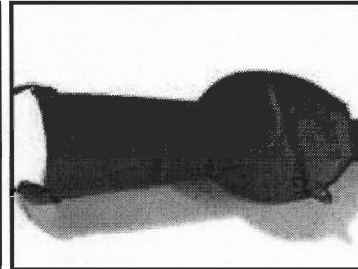
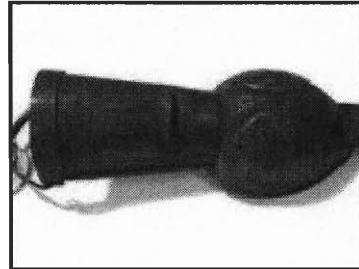
2418-4

3063-1



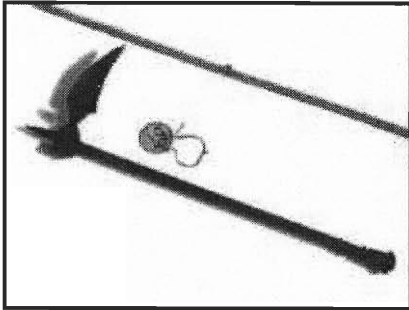
3063-2

3063-3

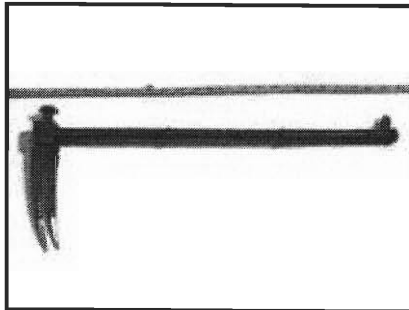


War Hammers

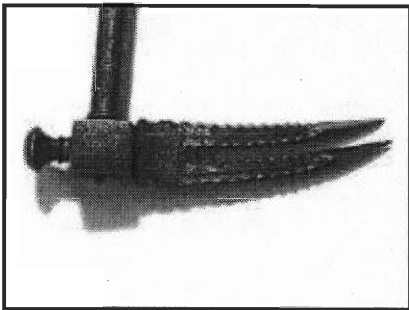
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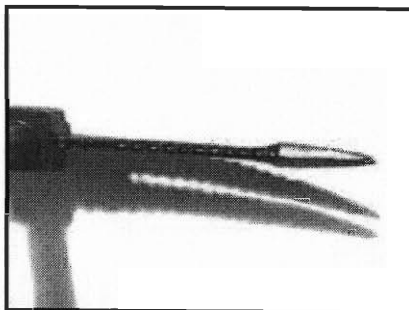
2413



2413

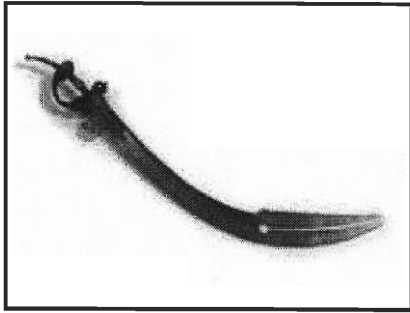


2413



Zulfikar

2240



2240

