## The Halberd and Other Polearms of the Late Medieval Period

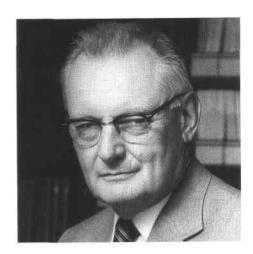
George A. Snook, MD

Starting at sometime in the 13th century and slowly evolving over 200 years was a weapon that in conjunction with the missile types of armaments resulted in the decline of dominance of the armored horseman. This weapon was the halberd, and I believe that this weapon and the other polearms are one of the more neglected subjects in the study of weapons. There have been a few attempts to remedy this situation, but the field is still mostly ignored. In a sense this is a paradox, because some of them are still used as the symbol of protection, as in the case of the Swiss Guards of the Papacy. In books about medieval weapons, they are usually relegated to a short chapter or sometimes simply a captioned photograph (usually incorrectly identified). The field is still waiting for a complete and definitive study.

Why is this weapon so neglected? There are several reasons. There is an aura about the sword in Europe, where it is symbolic of the military, of Justice, and of the romance of chivalry. In Japan, it is practically deified. Swords were used by the wealthy classes, and because of their value, they were carefully preserved. The polearm was a weapon of the peasant and was relatively cheap. A greater part of the weapon was wood, which does not withstand the passage of years as well as metal, and they were not as carefully cared for or preserved. The number of halberd heads that were melted down to be reused is probably staggering, and this usually was not the fate of swords. Finally, the one polearm that remained in active service for the longest period was the pike, which even the most dedicated enthusiast must admit is a pretty dull tool unless one is on the wrong side of it.

What is a polearm? For the purpose of this presentation, I will describe it as a weapon, fastened to a pole, used in hand-to-hand combat, and not used for missiles. This rules out arrows, quarrels, javelins, and shoulder firearms, especially hand cannons. I will confine this presentation to European two-handed weapons. The halberd will be considered in detail because of its importance in combat and its many and varied styles.

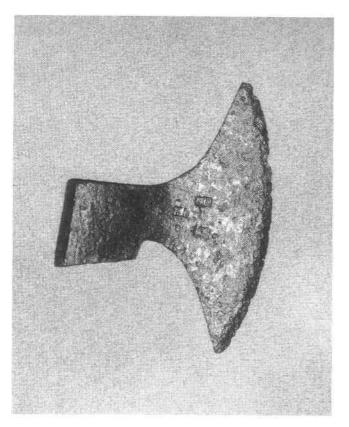
Where did the halberd come from? Although there are those who believe that the halberd developed from the weapon created when someone fastened a sword to a pole, I believe that weapon became the glaive, and the halberd logically developed from the axe. This concept is reinforced



by the facts that the axe was already in use and the sword was too valuable to be used in this manner.

The primitive axe consisted of a stone head placed in a cleft pole and secured with sinews or rawhide thongs. The strength was improved by inserting the shaft into a hole in the head. With advances in metallurgy, the stone was replaced with the axe head that we are familiar with. The axe heads of the Bronze Age up to the early Middle Ages were small because they were wielded with one hand if on horseback or with a shield if on foot (Fig. 1). It was probably the Vikings who developed the large two-handed fighting axe that became such a legendary weapon in Anglo-Saxon England and that has a prominent place in the Bayeux Tapestry. I believe the halberd arose from this weapon.

The initial change was the creation of two eyes in the head to fasten it more securely and to lessen the chance of breaking the shaft at the junction of the wood and metal. This weapon represents the earliest transition of the two-handed axe into the halberd (Fig. 2). Illustrations such as the Votive Tablet of St. Lambrecht in Graz show the wooden shaft extending beyond the head and possibly sharpened. It is a simple step to place a spearhead on the shaft and later to incorporate it into the head or to elongate the upper edge of the axe to form the spear (Fig. 3). It is known that force concentrated at a single point is more effective than when dispersed over a larger area. This is the concept that created the beak on the halberd. At first it was a separate beak between the two eyes or fastened onto the upper eye (Fig. 4). Eventually the two eyes were forged into a single socket, and we now have the halberd head in its final form.



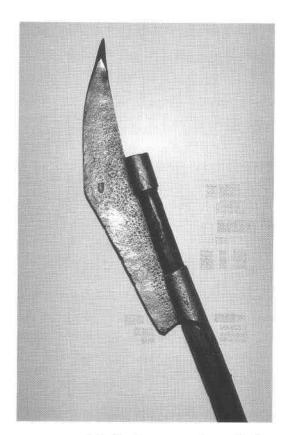


Figure 3. Early halberd—a two-eyed axe with the upper point elongated into a rudimentary spear.

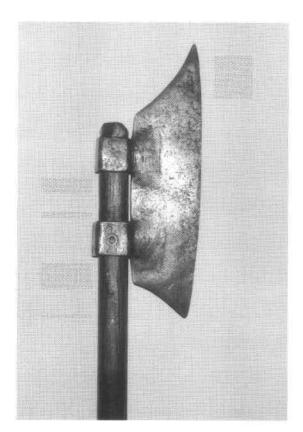


Figure 2. Prototype of the halberd—essentially a two-eyed axe.

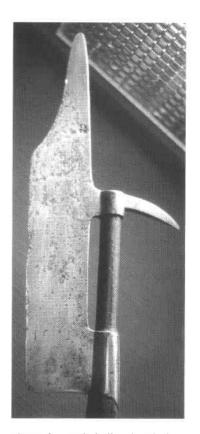


Figure 4. Early halberd with the beak added to the upper eye.

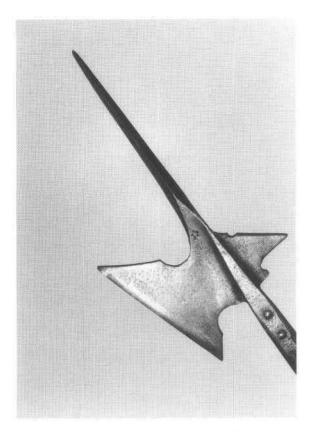


Figure 5. Landsknecht halberd.

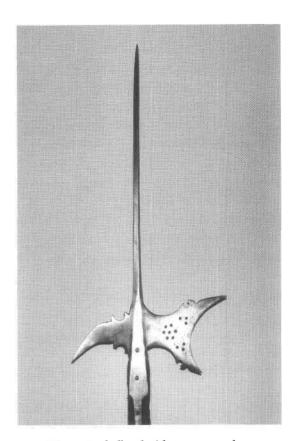


Figure 7. halberd with a concave edge.

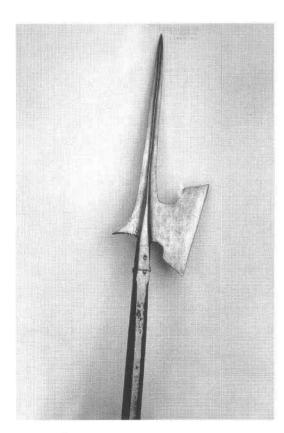


Figure 6. Landsknecht halberd.



Figure 8. halberd with a concave edge and with reinforcements at the points.

The earliest find of the true halberd was on the battlefield of Morgarten, from a battle fought in 1315. It has a long rectangular blade with a small spear point as an extension of the blade. By shortening and widening the blade and adding the beak and lengthening the spear, it gradually acquired its final proportions. With the many changes in its shape, it is easier in describing the halberd's evolution to take individual parts and describe them rather than the weapon as a whole. The reason is that although armorers made some halberds, blacksmiths made others. The quality differed from maker to maker, and the shape varied because of local custom or preference. Not all of the changes occurred at once, and one finds halberds whose parts show different evolutionary forms in the same weapon.

The axe blade is the most important part of the head. Originally it was rectangular, but by the mid 15th century the edge of the blade became oblique to facilitate a slicing rather than a chopping action. This shape lasted through most of the 15th century and into the 16th century. I think of it as the classic fighting halberd, call it the Landsknecht style of halberd (Figs. 5 and 6). Occasionally, the oblique blade became slightly convex, but in the latter half of the century the edge became concave or crescent shaped (Fig. 7). At first the sharp edge was efficient enough but soon quadrangular reinforcements appeared on the tips of the points of the blade and on the beak as well (Fig. 8).

The spear, at first little more than an extension of the blade, soon assumed an entity of its own, becoming narrower and longer. As it became longer, it was more vulnerable to breakage, and a median ridge was added to strengthen it. The flat spear with the median ridge soon became a quadrangular spear. In what was probably an attempt to lighten the weapon, some spears are flat at the lower end and then assume either the median ridge or the quadrangular shape a varying distance from the base. The early median ridge appeared at the start of the 15th century and the quadrangular spear toward the early 1500s.

The beak was at first rudimentary but grew in size. At first it pointed straight backward but by the mid 1500s it started to angulate toward the butt of the shaft. In the early part of this period, a flange appears at the base of the beak and a reinforced point toward the end (see Figs. 7 and 8).

The shaft of the Swiss halberd was almost always ash, but replacements or those made in other countries could be any tough wood. Initially the socket for the shaft was behind the axis of the spear. It was gradually moved forward and for a short time was in front of the axis. By the period of the Landsknecht halberd, it was in line with the spear and slightly later it developed a slight curve backward. Toward the end of the 16th century, a small metal collar around the shaft just

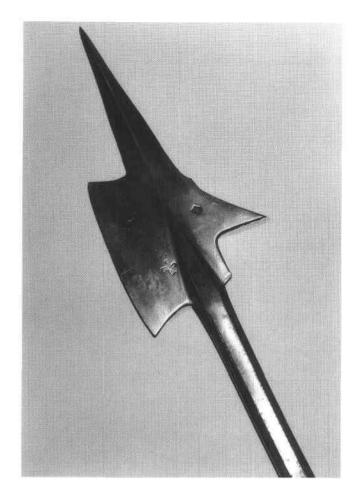


Figure 9. The "Sempach" halberd.

below the socket appeared. This is the zwinge and is a reinforcement of the shaft. It later became useful for attaching tassels to the ceremonial weapon (see Fig. 6).

Langets, which were strips of steel extending from the head down the shaft for a variable length, appeared early in the 1400s. They were integral with the head, and served to strengthen the shaft and helped to prevent the head from being cut off. Later two additional langets were added, which were not integral to the head. Early langets were laid on the shaft, and the later ones were recessed into the wood.

The use of the halberd declined starting about 1600, but in Switzerland its use was longer. A final form known as the Sempach halberd appeared. It had a broad, flat but short spear, a prominent beak, and a heavy but smaller head with a slightly convex edge (Fig. 9). This was known as a Sempach halberd by the Swiss because of its resemblance to those used at Sempach in 1386. Unfortunately, many writers have stated that this was the style used at Sempach, and this error has persisted. In the 17th century, the halberd began its decline as a fighting weapon. After about 1650, it survived as an insignia of rank, and at this time it started to assume ornate and occasionally bizarre shapes, and with elaborate engraving it became a ceremonial item, as in the Papal Guards.

To briefly summarize the changes:

- 1. Earliest prototype is a two-eyed axe.
- 2. Axe is elongated to a point, which evolves into a spear.
- 3. Beak is separate and merges to the blade when the two eyes combine into a socket.
- 4. Spear elongates and acquires a median ridge, which eventually becomes quadrangular.
- 5. Axe blade becomes shorter and wider. Its edge, at first parallel to the shaft, becomes oblique and then concave. Occasionally they might be convex. The points of the concavity and the tips of the beak and spear become thicker and quadrangular to reinforce the points.
- 6. In the final form of the fighting halberd, the point shortens the edge, becomes mildly convex, and the whole head is heavier. This is in the early 17th century, when the weapon has become obsolete, and is the so-called "Sempach" halberd.

Why is the halberd important? Why did it appear on the European scene starting in the late 13th century with all the effect of a secret weapon? To explain this, we must look at warfare styles leading up to this period to study the history of the polearm. The thrusting spear was the primary weapon of the classical Greek phalanx. The heavily armored hoplite packed into a tight phalanx with their 6- to 8-foot spears were a ponderously slow but solid defensive array. After an appropriate time for the delivery of taunts and insults, the phalanxes closed with the pushing of the shields and stabbing of the spears. This continued until one side gave way, and then the battle became a brawl. Philip II of Macedon made three major changes in this system. He introduced the sarissa, a 20-foot pike, lightened the defensive armor of the soldier, and increased the number of ranks of the phalanx. This pike was an unwieldy weapon, but when presented in serried ranks and advancing at a steady pace, they overwhelmed the Greeks with their shorter weapons. This pike was a two-handed weapon, so the shield was smaller and suspended by a strap around the neck and controlled with the forward arm through another strap.

The basic weakness of the phalanx was a lack of agility. The Romans at Cynocephalae exploited this in 197 BC when the Macedonians were attacked in the flank and they were unable to change fronts quickly enough. The defeat of the Roman legions at Adrianople in 378 AD by the armored cavalry heralded the dominance of the horseman for the next 1,000 years. Infantry if armed and disciplined could hold out for short periods, as shown at Hastings, but the eventual triumph of the cavalry was almost a foregone conclusion. The horseman was not invulnerable, however. In unfavorable

terrain such as the highlands and forests of Scotland and Wales or in the mountains of Switzerland, he was not unconquerable. At about the time that spear (pike) formations were being developed in these areas, the archer developed in the more open country. The Welsh had their spearmen, but the archer soon took precedence, possibly because of the vew tree. In Scotland at Stirling Bridge and Bannockburn, the schiltrons or hedgehogs of pike men won the battles, while Falkirk showed that pikes alone were very vulnerable and combined arms were needed. In Switzerland, it was the halberd that became the important weapon. They had already adopted the crossbow as a weapon, but something was needed for the brawl when the forces closed. The halberd fitted this requirement. Was it effective? John of Winterthur wrote of the battle of Morgarten in which his father fought: . . . "The Swiss had in their hands a terrible sort of weapon called a halberd with which they cut their heavily armored opponents to pieces as though with a razor." A little later he writes of Swiss mercenaries near Colmar: "The King of Bohemia saw their weapons called halberds and how easy it was to kill with them. He says with amazement, 'What a terrible aspect of this formation with their horrible instruments of death." With the ability to be used to thrust and cut both with forehand or backhand, it was indeed a terrible weapon. Charles the Bold of Burgundy was killed at Nancy in 1477 by a halberd blow, which cleaved his head from brow to chin in one blow. We do not know for certainty that it was a halberd. His body was not found for 3 days and had been partially eaten by animals, but the wound itself would not be altered.

The halberd formations alone could not win battles. After Sempach (which the Swiss nearly lost), the use of pikes was introduced and the combination of 20-foot pikes, cross-bowmen, "dopplesoldners" with two-handed swords, and halberdiers, the Swiss earned such a reputation that they were in demand as mercenaries throughout Europe. Even today their legacy lives on in the Papacy. Emperor Maximillian I was impressed sufficiently with the Swiss that he created the Landsknechts on the Swiss model. The two forces hated each other and fought the same way. Their ruthlessness and the policy of taking no prisoners made their battles the most terrible ever seen on the continent. This form of combat was successful until the early 17th century, when the Spanish tercios with their emphasis on firearms ended the Swiss style and the halberd era.

The pike continued to be of importance in protecting the musketeer as he loaded his weapon. It was still the only weapon that could repel cavalry, and in the early 17th century the pike was still the principle weapon of the infantry. As the flintlock replaced the matchlock and the

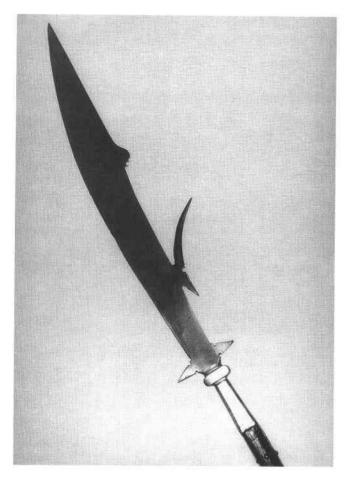


Figure 10. The glaive.

bayonet appeared, the pike also withdrew from the battlefield. It did survive in altered form as the linstock when artillery was fired by the match. It remained in the navy as a boarding pike for another 200 years and was issued even during our Civil War, and the British Home Guard in World War II.

Although I have taken the halberd as the principle polearm of this period, there were several others available. This fact is also responsible for many entertaining arguments over the proper terminology. I have classified these weapons into the following categories:

- 1. Cutting polearms
- 2. Thrusting polearms
- 3. Percussion polearms
  - a. Piercing
  - b. Crushing
- 4. Combination polearms

Cutting polearms probably came from agricultural instruments. Their distinguishing feature is that they were primarily used for cutting. The couteau de breche was essentially a knife attached to a pole. Its cutting edge was on the convex side. The glaive was a longer version and occasionally had a parrying hook on the back (Fig. 10). The military scythe was essentially a scythe blade mounted on a pole. It differed from

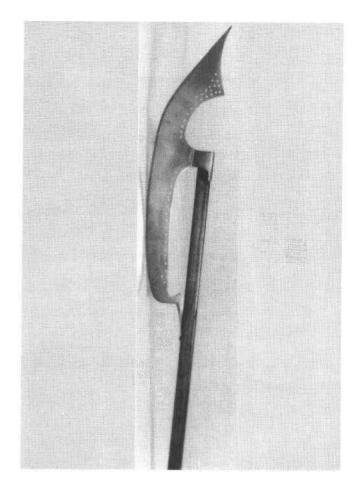


Figure 11. The bardiche.

the glaive in that its cutting edge was on the concave surface. The bardiche is a Russian weapon with a long cutting blade that extends far beyond the shaft and is attached with a socket at the upper end and nailed to the shaft at the lower end (Fig. 11). It appears in the 16th century. The Lochaber axe is a two-eyed axe on a pole. It has a larger head than the halberd, and sometime after the early Renaissance it acquired a backward-facing hook. The doloire is a huge two-handed axe that has a teardrop-shaped blade, giving it a pointed tip and a rounded bottom. It is sometimes called a wagoner's axe and looks much like a German broadaxe (Fig. 12). The guisarme is a very odd weapon that some writers believe did not exist. That the name existed is certain, but what it referred to is uncertain. The thing we call a guisarme has a very slender concave cutting blade with a right-angle spike at the rear (Fig. 13). In comparison to these other weapons, it appears very fragile, and its efficiency compared with the others is in doubt.

The basic thrusting polearm is the spear. It could be used in a stabbing manner or thrown as a javelin. In the period we are considering, its form is the pike. This had a long shaft ranging from 10 to 20 feet and a small head for easier penetration. The heads could be leaf, lozenge, or needle shaped. The Ahlspiess (awlpike) is a long, thin



Figure 12. The doloire.

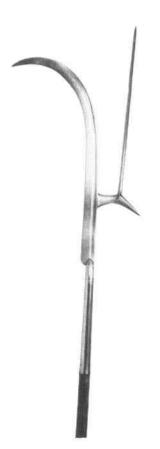


Figure 13. The guisarme.

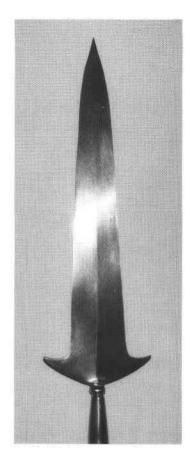


Figure 14. The partisan.



Figure 15. The runka.

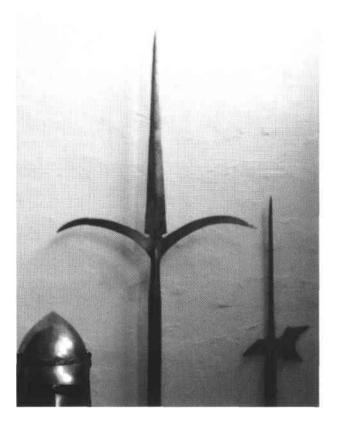


Figure 16. The corseque.



Figure 17. The chauve souris.

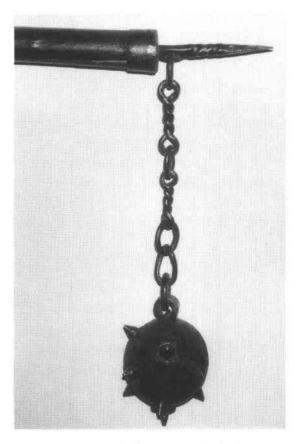


Figure 18. The flail with a spiked ball.

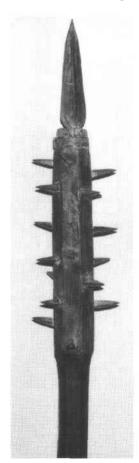


Figure 19. The morgenstern.

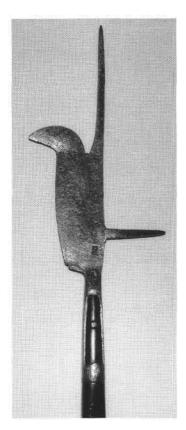


Figure 20. The bill.



Figure 21. Another type of the bill.



Figure 22. The kriegsgertel.



Figure 23. The roncone.

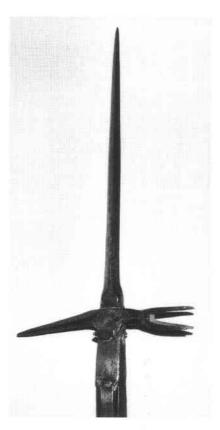


Figure 24. The Lucerne hammer.

quadrangular needle about 50 inches in length with a disc-shaped guard to protect the hand at the base of the needle. It was made for fighting in the lists in tournaments. The military fork looks like a rugged pitchfork. It may have a stop at the base.

The Langue-de-boeuf is an early thrusting spear. It has a long, flat, usually triangular blade tapering to a point. It has no protuberances on the blade. The early specimens had no reinforcing central ridge, but these appeared by the 15th century. The partisan is the lineal descendant of the langue-de-boeuf and in fact is a langue-de-boeuf with wings at the base (Fig. 14). The early partisans have small wings and no central ridge. By the 16th century, they have the median ridge, and the wings are larger. Belted swellings on the socket appear at the same time. The runka (Fig. 15) is a partisan with large sharp wings curving toward the tip. The corseque (Korseke) (Fig. 16) is the same, except the wings turn toward the butt of the shaft. The chauve souris (bat wing) (Fig. 17) is a spectacular version of the runka.

Percussion polearms are designed to do their damage by a blow. If there are protruding spikes, it would be a piercing-type; otherwise it would be a crushing version such as the war hammer or mace. The military flail is an adaptation of the agricultural flail. The striking part was attached by a linkage, heavier, bound with iron bands, and might have spikes set into the head. Another version had an iron or



Figure 25. A variant of the poleaxe.

wooden ball attached by a chain that might have spikes attached (Fig. 18). The military version of the club had several different names. It is basically a wooden club set with spikes (Fig. 19). It was variously known as a Holy Water Sprinkler, a Morgenstern, and in Flemish a Godendag. At Courtrai in 1302, the Flemings defeated a force of French knights, and among the weapons used were what is assumed to be a godendag.

Combination arms are those that have two or more of the previous characteristics. The halberd is the typical example. The Bill is the English version of the halberd. It has a cutting edge, a spear, and a beak. It has a curved end, as seen in the agricultural version, and is much the same as the halberd but not as heavy (Figs. 20 and 21). The Kriegsgertel looks like a bill that has lost its spear (Fig. 22). It has been described as a bill or as a military scythe, but it really is neither. I have identified it by its German name for the present. The Roncone is the Italian version of the bill. It has a longer cutting edge with a convex shape to the cutting edge. It generally has two lesser beaks at the lower end of the blade (Fig. 23). It is not as robust as the halberd, and its German name (Rosschinder) (horse cutter) gives a good idea of its function. The Lucerne Hammer gets its name from the Swiss city. We do not know if it was a favored weapon or if it was made there. It consists of a spear and beak, as in the halberd,

but in place of the axe is a four-pronged hammer. It also has two lugs at the base of the head at right angles to the axis of the hammer (Fig. 24). The poleaxe is a shorter and more rugged type of halberd. Originally designed for fighting in the lists, it was also used in combat. Its usual form has a shorter axe blade with a straight edge and a four-pronged hammer replacing the beak. Other variations can have a convex edge, a beak, and even a flat spear instead of the usual triangular one (Fig. 25).

This is a brief summary of the medieval European polearms. Their period of importance was brief, but in that period they exerted a significant effect on the conduct of battle. No one single element was supreme. The archer would defeat the foot infantry, but the archer was helpless in the rain, and if the cavalry could get close enough, the arrows would not be enough. The halberd and its relatives enabled the footsoldier to meet the horseman on even terms in a general melee. The fact that when used properly it was capable of cleaving through armor made it a very valuable tool in the hands of the foot soldier and helped hasten the decline of the importance of the armored horseman.

## PHOTO CREDITS

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