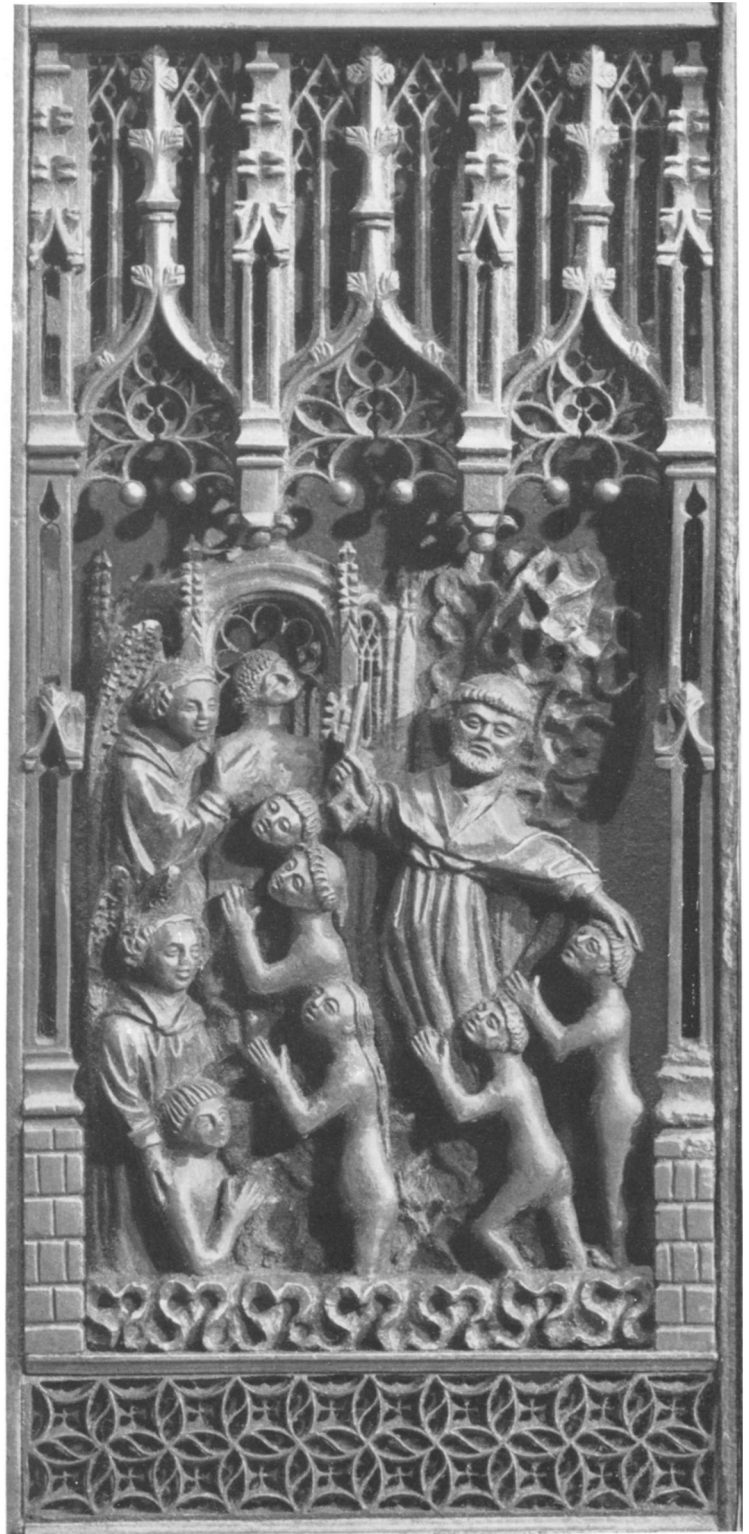


December 1969



The Metropolitan Museum of Art BULLETIN



*Detail, actual size, of the iron lock
shown on pages 164-167*

The Art of the Medieval Blacksmith

JEFFREY M. HOFFELD

*Research Assistant for The Year 1200 Exhibition
and Lecturer, Brooklyn College of the City University of New York*

While the biblical metaphor of beating swords into plowshares primarily expresses an antiwar sentiment, it also represents the ancient world's conception of the mutability of material substance. The soul is unchangeable, but the objects of experience are mutable: metal can be heated, turned into a liquid, fashioned, cooled, and resolidified. This conception was inherited by medieval man, and his frequent disdain for the events and objects of the earthly world is a manifestation of his belief in the illusory nature of the tangible and his faith in the realness of the intangible. The Middle Ages often capitalized, especially in art, on the idea of the changeability of the substantial. The medieval artist often concerned himself with simulating precious materials with common ones, with changing the rigid and coarse into the plastic and delicate, and the reverse. Medieval art itself sometimes seems to be a form of alchemy. This can be seen clearly in *The Art of the Medieval Blacksmith*, an exhibition of ironwork that will open this month at The Cloisters.

The greatest demand for things made of iron has always come, as Pliny relates in his *Natural History*, from the farmer, the architect, and the soldier:

Iron serves as the best and the worst part of the means of life, in that we plough the ground with it; we plant and prune trees with it, force vines to renew their annual youth by removing decrepit growth from them. With iron we build houses and quarry rocks. We employ it for all kinds of useful purposes, but we also utilize it for wars, slaughter, and plunder – not only in direct encounters, but also as a winged missile.

Most of us think of the armorer as the chief medieval worker of iron, and this is probably true; however, the later Middle Ages was practically a second Iron Age, with objects of widely varied uses being made of the metal. Although earlier craftsmen sometimes produced decorated ironwork, these objects, such as Beowulf's sword with an "etched design" and elegant Romanesque doorbands, do not seem to have been made of iron as the result of a taste for the material as such, but because of its strength. The Gothic smith, on the other hand, actually chose iron as a medium for sculpture. While most Gothic ironwork is functional, it represents a taste for the metal's aesthetic qualities as well as for its practical advantages.

Such a taste was probably not easily cultivated. There were aspects of the former uses of iron, and possibly of its symbolism, that had to be overcome or reconciled with its use for works of art, especially religious ones. Iron was associated with war and

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Hinge, also illustrated on page 163. German, XV century. Wrought and incised iron, length 19½ inches. Gift of Henry G. Marquand, 87.11.688

agriculture, and the association with agriculture may have been especially difficult to surmount: not only had iron been devoted to farm implements, but the material itself, coarse and dark, is so clearly a product of the earth. Unlike gold, rock crystal, or diamond, however, it does not have the fascination of being engendered of the earth yet unlike its source; it neither gleams nor sparkles, neither absorbs nor radiates light mystically. More important, its connection with farming probably carried with it some implication of inferior social status: iron's coarseness and color may have linked it with the lower classes. Chaucer's parson, disturbed at the corruption of the clergy, asks, "if gold ruste, what shal iren do?"

In spite of these negative associations, there were several overriding practical considerations that may have prompted its more frequent use during the later Middle Ages. First, the methods and equipment used in the forging and casting of iron had greatly progressed since the earlier medieval period, enabling the smith to work more precisely and delicately. Especially influential among the many technological changes were improvements in furnaces, such as the introduction of water-driven machinery in the fourteenth century. Water was now used to operate the bellows for each furnace, increasing the quantity of pig iron that could be produced, and to operate large tilt hammers that converted pig iron into wrought iron.

These technical improvements, however, might have been inspired by an increased demand for works of iron. Such a demand un-

doubtedly arose as one of the many products of urbanization in the later Middle Ages. The development of towns resulted in the formation of centers for particular crafts, such as that of the smith, which provided the ironworker with a stable, centralized market. This market not only required those objects traditionally fashioned of iron, but called upon the blacksmith to create works of strength and beauty for many different purposes. The great churches—the new symbols of urban centers, often constructed with the financial assistance and expertise of the guilds—needed iron devices to both reinforce and lock their heavy doors. Because these fixtures constituted part of the doors' outward appearance, they had to conform to the exterior decoration of the building. The smith was also confronted with the demands of a growing bourgeoisie, for whom he made elaborate door mountings like those of the churches, as well as other objects for secular use, such as coffers, purse frames, and fire-place implements.

One could argue, too, that the proliferation of iron locks, keys, hinges, handles, and window grilles reflects the psychological atmosphere of the later Middle Ages, when private ownership was an increasingly common phenomenon, and when many churches had to protect the accumulated wealth of their treasuries. The predominance must also reflect the religious emphasis on the importance of the entrance to a church, the difficulty of entering both church and heaven, and perhaps an allusion to St. Peter and his supremely important keys.

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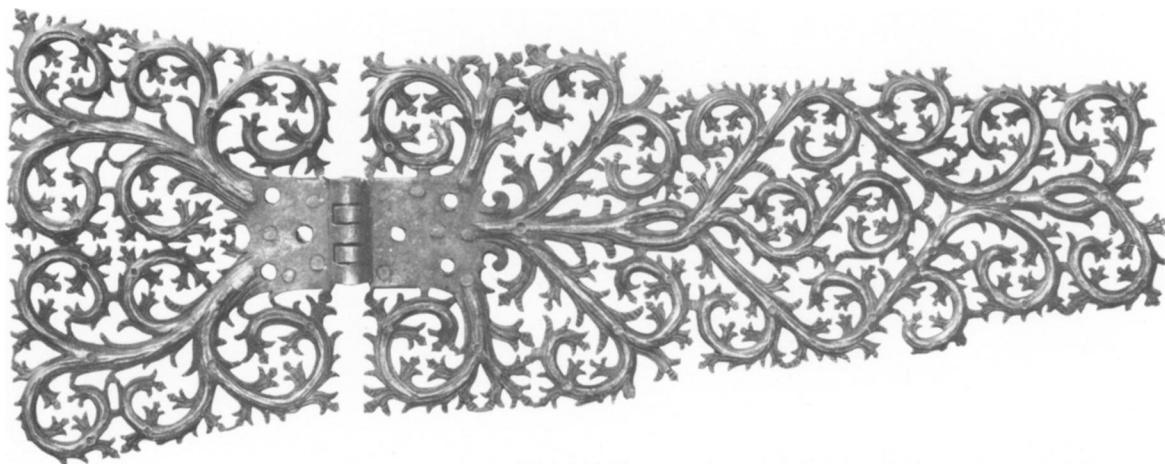
DECEMBER 1969

Published monthly from October to June and quarterly from July to September. Copyright © 1969 by The Metropolitan Museum of Art, Fifth Avenue and 82nd Street, New York, N. Y. 10028. Second class postage paid at New York, N. Y. Subscriptions \$7.50 a year. Single copies seventy-five cents. Sent free to Museum members. Four weeks' notice required for change of address. Back issues available on microfilm from University Microfilms, 313 N. First Street, Ann Arbor, Michigan. Volumes I-XXXVII (1905-1942) available as a clothbound reprint set or as individual yearly volumes from Arno Press, 330 Madison Avenue, New York, N. Y. 10017, or from the Museum, Box 255, Gracie Station, New York, N. Y. 10028. Editor of Publications: Leon Wilson. Editor-in-chief of the *Bulletin*: Katharine H. B. Stoddert; Assistant Editor: Susan Goldsmith; Designer: Peter Oldenburg.

Any discussion of the reasons for iron's popularity at this time must not neglect the inherent aesthetic qualities of the objects. Much of the decoration of Gothic ironwork may have been drawn from other, highly developed media, just as many Gothic artists were interested in simulating the effects of metalwork in their own crafts, such as manuscript illumination or architecture (an example being the Ste. Chapelle in Paris, a thirteenth-century royal chapel conceived as a large reliquary, with details and materials reminiscent of metal ones). Gothic ironwork often displays extraordinary precision and delicacy of detail, despite the difficulties of working in this metal. The drapery styles and facial types of manuscripts and sculpture are forged in iron, and the sensitive tracery of ar-

chitectural ornaments is simulated in filigree. permanence of their medium, imitated the styles and imagery of considerably earlier works in an attempt to invest their art with a suitable sense of antiquity.

The Cloisters exhibition presents for the first time one of the largest and most important collections of medieval ironwork in the world. The works of art, many of which were originally in the extraordinary collection of Samuel Yellin of Philadelphia, come from the Museum's Medieval Department and The Cloisters, with examples of armor from the Arms and Armor Department. In addition to door appliances, there are agricultural implements, technical instruments, coffers, and armor. The works described here will provide the reader with an idea of the range and the quality of the art of the medieval blacksmith.



chitectural ornaments is simulated in filigree. In addition, iron objects have an innate monumentality, due to their weight, color, and solidity. Consequently, motifs and subjects could have been derived from architecture or architectural sculpture that did not lose their effects of massiveness and permanence when reduced in size. Thus it is often difficult to determine the use of iron objects, for many seemingly monumental works—such as the lock on pages 164-167—may have been made for coffers or furniture, rather than large doors.

At times an object's style does not reflect that of contemporary media. Such pieces may have been based on older ones, but it is possible, too, that blacksmiths, aware of the

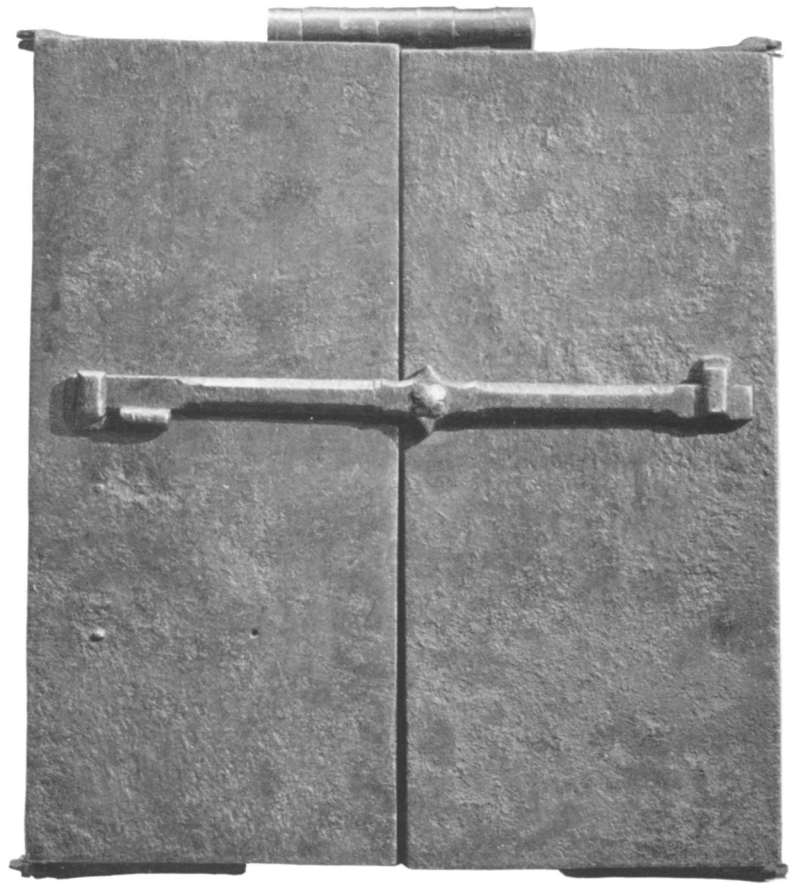
NOTES AND REFERENCES

This article and the exhibition at The Cloisters herald the preparation by the author of a catalogue of the Medieval Department's collection of ironwork. This is a field in which relatively little has been published, and I would be interested in hearing from anyone who has done research on the subject or who has information about medieval ironwork, especially about the pieces on exhibition.

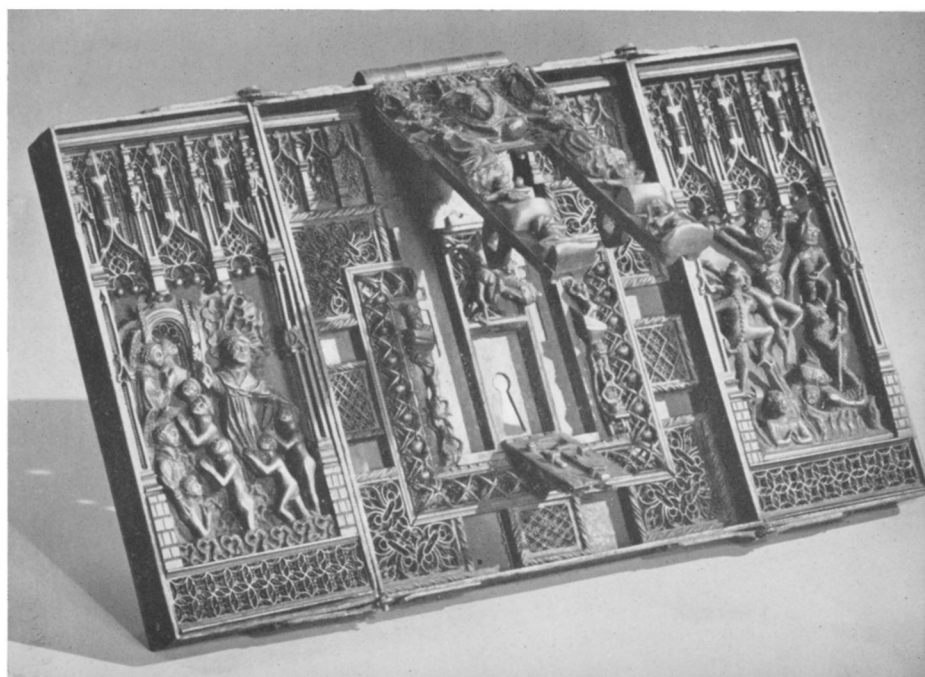
Charles Singer *et al.*, *The Mediterranean Civilizations and the Middle Ages*, Vol. 11, *A History of Technology* (Oxford, 1957).

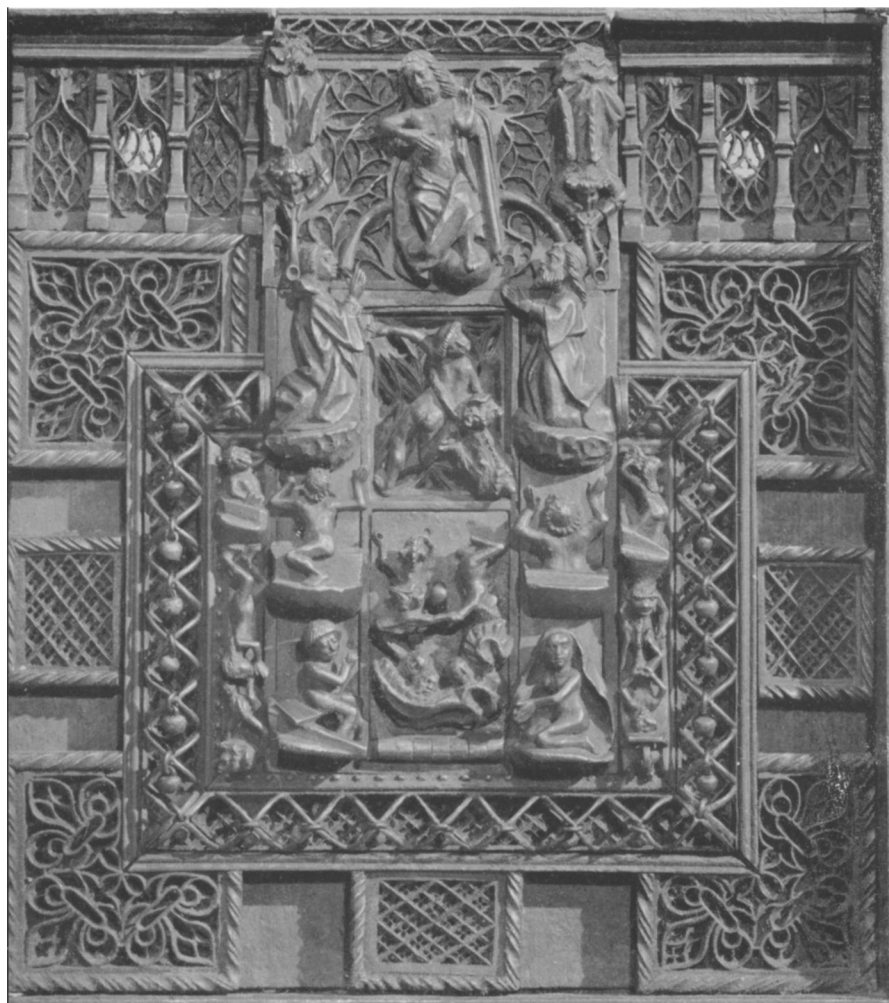
Made of Iron (Houston, 1966), the catalogue of an exhibition of ironwork held by the University of St. Thomas Art Department.

Henri René d'Allemagne, *Decorative Antique Ironwork* (New York, 1968). Introduction by Vera K. Ostoia.



This was probably the lock for a chest. Designed in the form of a triptych, the mounting represents the Last Judgment of Christ. The Day of Judgment is announced by the trumpeting angels who flank Christ at the top of the center panel. Below him are the Virgin and St. John, demons, and souls rising from their sepulchers. The panel on the right pictures the torture of souls in hell, while the left panel shows angels and St. Peter holding his key directing the blessed through a door to paradise, recalling Christ's statement in John x:9, "I am the door." This miniature sculpture – only eight and a half inches high – has been conceived as if it were the monumental tympanum above a church doorway. Not only is the pictorial program an ambitious one, which resembles larger works of stone, but the decoration, too, is architectural, consisting of arches and tracery executed in the flamboyant style of late Gothic. The monumentality of the subject has been tempered by the sensitivity of detail. The surface has been polished to produce highlights and a flickering effect, which animates the figures and produces a dynamic whole.





Iconographically, the lock may be viewed as an elaborate metaphor. Finding the keyhole may be as difficult as following the true course: one must first open the panel with the hell scene, then the panel showing the entry into heaven, and finally release a series of catches. Opening the scene illustrating the fate of sinners first may serve as a visual warning to potential thieves.

French, late XV century. Wrought and chiseled iron; height 8½ inches, width (open) 14⅞ inches. Gift of J. Pierpont Morgan, 17.190.362



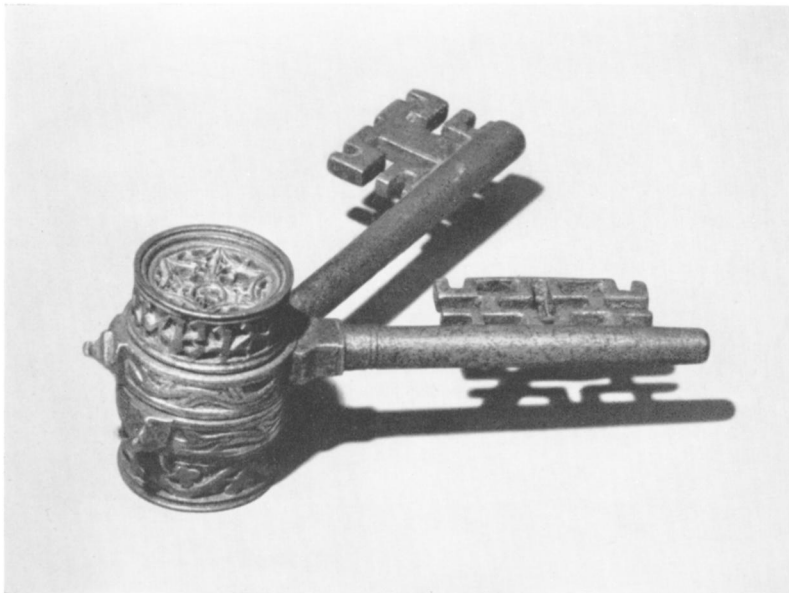


Instead of a chiming bell, this door knocker itself carries an appropriate salutation in the inscription *Ave Maria*. The bail, or hoop, of the knocker is formed by two thistle-stem volutes, whose design is repeated in the shapes that attach the knocker to the post in the door. The vegetal motifs of the knocker are complemented by those of the escutcheon, which has been pierced and engraved with a pattern of acorn-tipped thistle scrolls.

German, late XV century. Wrought and engraved iron; bail, width $7\frac{3}{8}$ inches; escutcheon, height $6\frac{7}{8}$ inches. Gift of Henry G. Marquand, 87.11.701

While there is a modern taste for leaving the heads of bolts and nails exposed, the medieval smith preferred to make them decorative, if not to disguise them entirely. This stud and plate, then, are actually an elaborate nailhead: the head is that of a grotesque, which holds a small lizard-like reptile between its jaws. It is interesting to observe that from certain angles the lizard looks like a key. The surface of both plate and head, incised or stamped with circular and scroll designs, and the configuration of beasts are reminiscent of many earlier works of medieval art. The smith may have wanted to give his work a sense of antiquity by applying earlier motifs.

European, XV-XVI century. Wrought, chiseled, and incised iron; stud, length $6\frac{3}{4}$ inches; plate, diameter $2\frac{5}{8}$ inches. The Cloisters Collection, 52.121.13a,b



The keys of the Gothic period are nearly as cumbersome as the locks and door knockers. Keys from the earlier Middle Ages are usually simple and undecorated, fashioned exclusively for utility, while Gothic keys are often elaborately conceived and decorated. This piece is a cylinder on which two keys rotate. The sides of the cylinder are pierced with tracery, and the circumference has a now-illegible inscription on one end and a vine-tendrill design on the other. This design itself conveys the spirit of all these works: in small scale the smith has reproduced the monumental Gothic tracery style.

European, XV-XVI century. Wrought and chiseled iron, length (open) $5\frac{1}{4}$ inches. The Cloisters Collection, 55.61.44

LEFT

This door knocker reveals the skill of the blacksmith, who created in a single work delicate effects alongside rugged ones. The plate, which secured the heavy knocker to the door, is decorated with a deep openwork design, which ends at the bottom in the form of a stylized face. This face is the first in a series of heads arranged in totem-pole-like descent; next is a griffin with two pairs of wings, coiling its serpentine tail around the bar above; and last is a devilish face. The heads complete the separate elements of the knocker in the same way that drawings of human and animal features punctuate line endings in contemporary manuscripts. There is an extraordinary play of light along the surface here: it is caught and contained within the deep recesses of the openwork design, while it flits along the faces of the grotesques, accentuated by their arrangement on different planes.

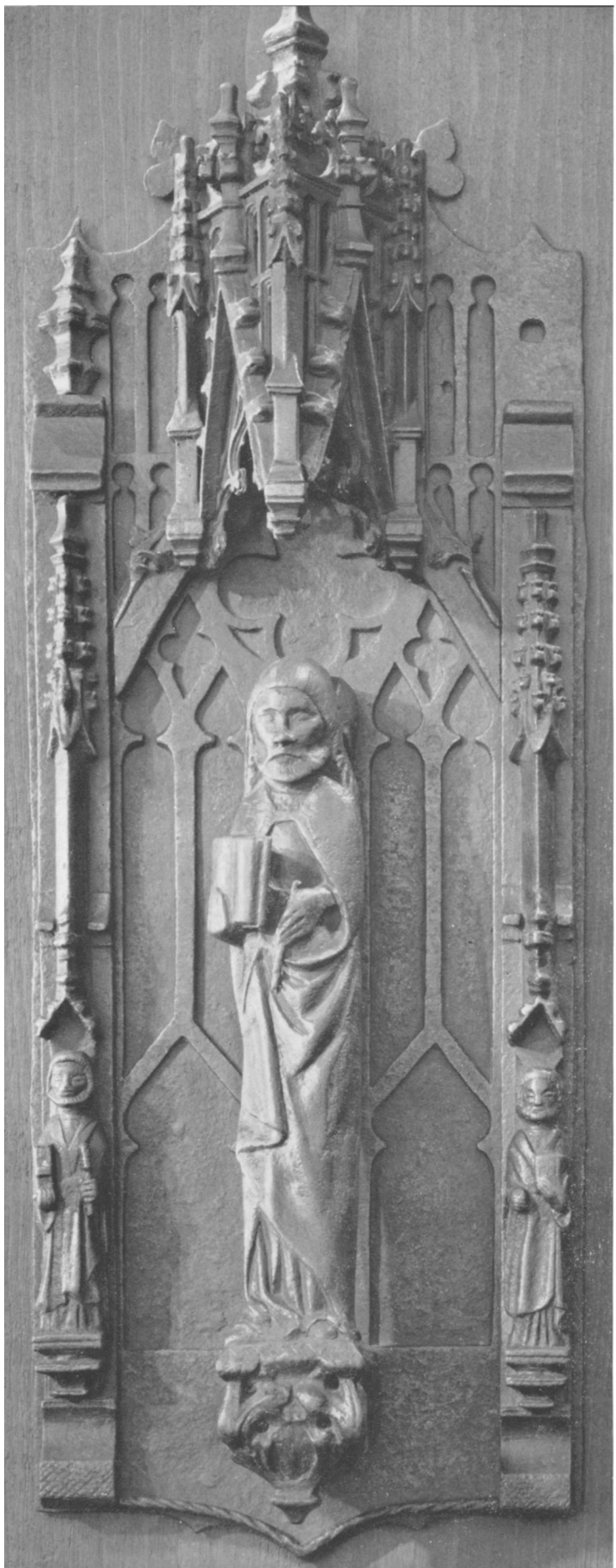
European, XV-XVI century. Wrought and chiseled iron, length 20 inches. The Cloisters Collection, 55.61.27

RIGHT

The provenance of works of iron is sometimes established on the basis of the style and identity of the figures embellishing them. Just as a stained-glass window might contain a representation of the patron of a building or the saint of the area in which it was built, ironwork is often a vehicle for acknowledging patronage. Such may ultimately be found to be the case with this knocker, which bears likenesses of three figures. The knocker itself is in the form of a man standing on a foliate crocket beneath a canopy, conceived very much like the trumeau statue of a building. He is flanked at the bottom by two smaller figures, which also serve as the bolts for the plate. The background within the niche, formed by two lancets crowned by a quatrefoil, is like a stained-glass design. The naturalistic manner in which the drapery ripples and falls at the man's feet, combined with the depth of the niche, produces the illusion of a living, free-standing figure.

European, XV-XVI century. Wrought and chiseled iron, height 20¼ inches; height of knocker figure 7 inches. The Cloisters Collection, 55.76.1





Many objects of iron can be characterized by their achievement of a balance between the massiveness and solidity of architectural motifs and delicate details, such as openwork, usually found in other metalwork. Nothing, perhaps, exemplifies this sense of balance better than the iron frames made for purses: the weight of both the material and the architectural members that it simulates has been modulated and softened by skillful casting and piercing to produce a light, elegant design. The wheel at the top of the clasp is removable; it is used as the key for the hole in the back.

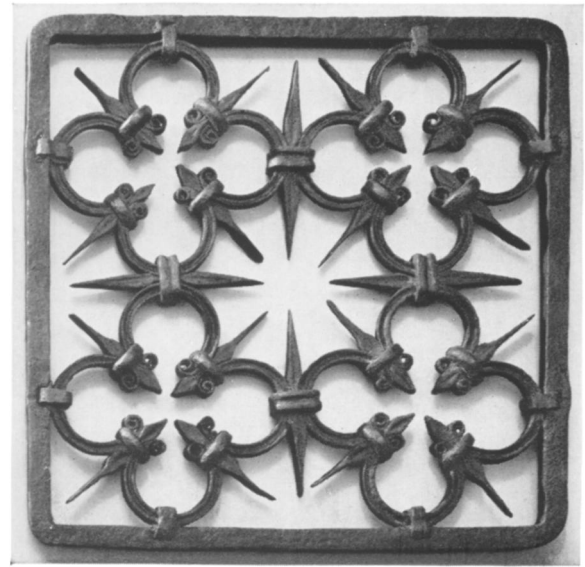
Many secular objects of iron were produced, but they do not constitute a separate artistic genre for, as we can see in this purse, they often include the same kind of architectural decoration that is found in religious ironwork.

European, XV-XVI century. Iron and red, cut, voided velvet (XV century), height of clasp 6 inches. The Cloisters Collection, 52.121.3



Although the provenance of most of the other pieces is unknown, we do know that this nearly square grille is from the Palazzo Sanudo ora Barozzi in Venice. While it is more subtle than barbed wire, this grille would discourage anyone from putting his hand through it. Yet its function is softened by a design that is almost heraldic. The incongruous combination of the roundness of the quatrefoils and the needle-like projections at the interstices of their arcs produces the effect of a pincushion on the surface of the piece. This composition can be compared with those in other media of the time: designs stamped on leather book covers were especially close.

Italian (Venice: Palazzo Sanudo ora Barozzi), xv-xvi century. Wrought iron, $14\frac{3}{8} \times 14\frac{1}{4}$ inches. The Cloisters Collection, 55.61.48

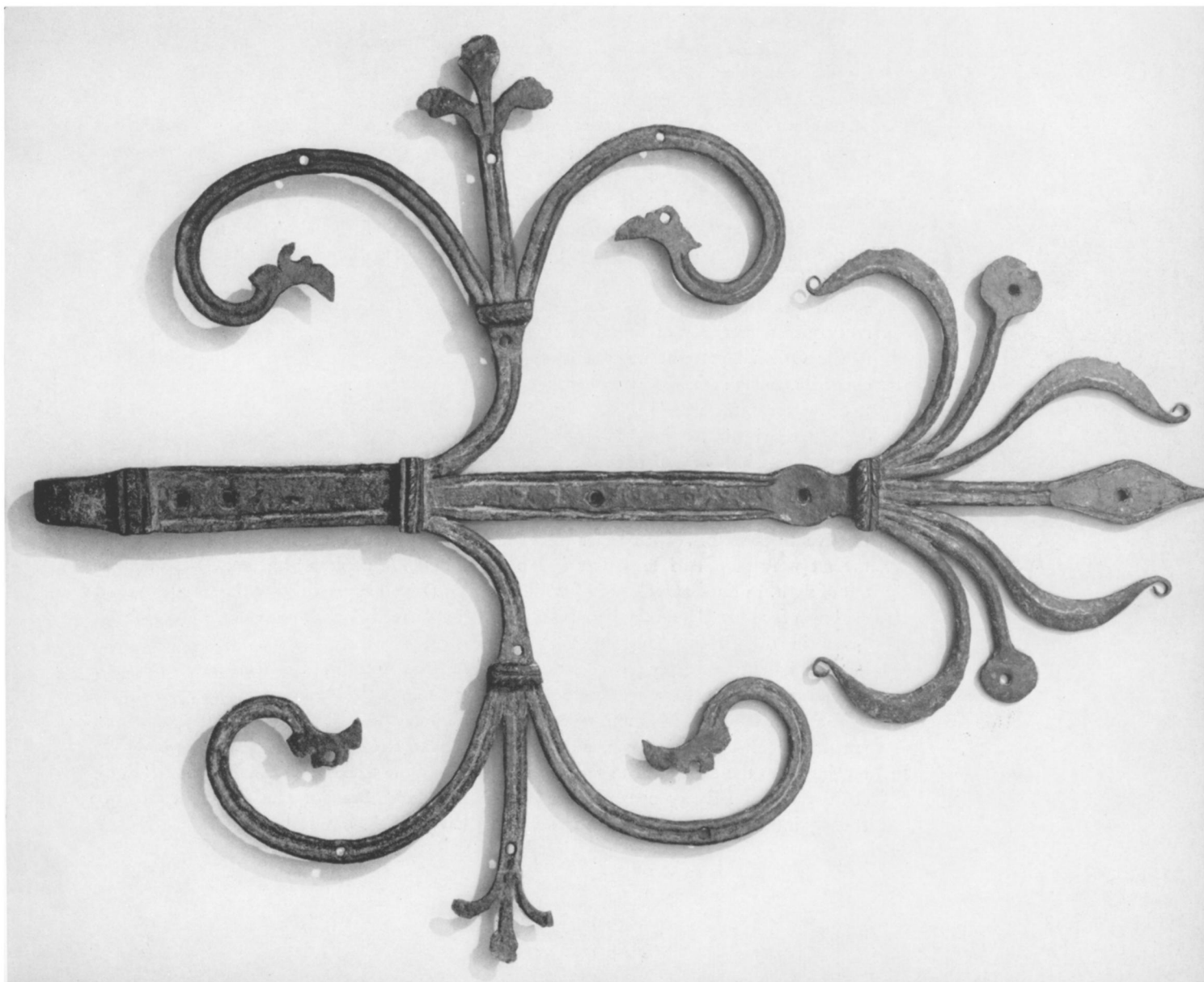


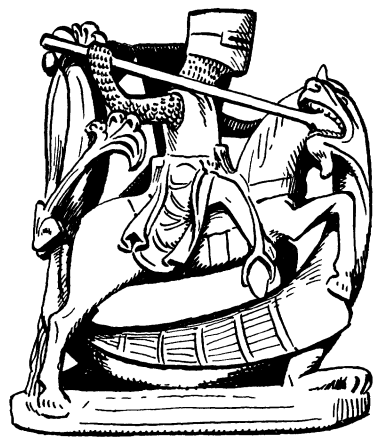
This animal was originally one of a pair of supports for a spit. Its stylized vertebrae were used as notches for adjusting the level of the spit above the fire. In view of the similarities between this piece and some from the early Middle Ages, there is reason to believe that the function of such objects determined their form to such an extent that the Gothic blacksmith was disinclined to introduce any radical changes in their traditional design.

Spanish (?), xvi century. Wrought iron, height 18 inches. The Cloisters Collection, 58.174.2

This is one of a pair of hinge bands, which, because of its fragility, was probably not used to reinforce a door but rather to ornamentally extend the door hinges. The floral scrolls reflect the Gothic interest in organic plant-like motifs. Like many of the other pieces, this one seems to display a desire to integrate the materials of the door and its mountings by treating the wooden door as if it were still alive and able to sprout new branches.

European, XV-XVI century. Wrought, chiseled, and incised iron, length 26½ inches. The Cloisters Collection, 55.61.46





Sir Gawayne and the Three White Knights

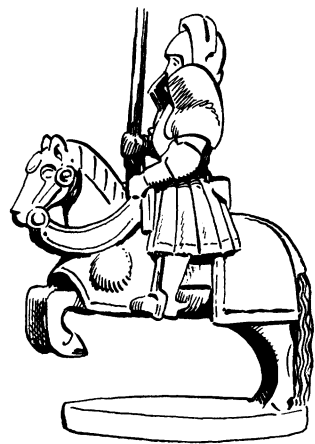
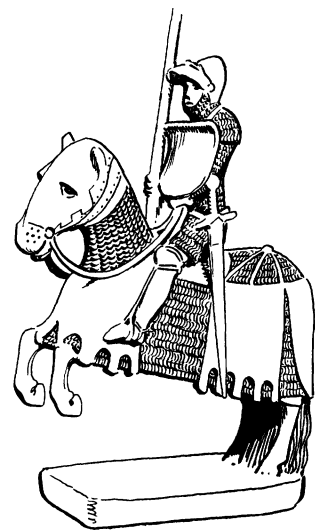
HELMUT NICKEL *Curator of Arms and Armor*

Among the many adventures Sir Gawayne goes through in Wolfram von Eschenbach's *Parzival* is the delightful episode in which he is playing at chess with the beautiful princess Antikonie in her bower; suddenly her enraged brothers arrive and start breaking down the door. Sir Gawayne, who had singlemindedly left his weapons with his horse, snatches up the chessboard as a shield and the bolt from the shattered door as a mace, while the lovely Antikonie pelts the spoilsports with the carven chessmen, and "whom she hit with rook or king, he sank to the floor, and forgot to rise for a while." The chessmen that the quick-witted princess let fly so freely were—as Wolfram carefully points out—massive ivory pieces, certainly of the abstract, geometric Oriental pattern; western European chessmen, though often solid enough, tended to be representational and less compact. Many of them were intricately carved in the shape of kings, queens, bishops, and, of course, knights. The knights seem to have survived in relatively large numbers: perhaps they were more attractive to collectors, when other pieces of the set were permitted to scatter and pass out of sight. In the famous hoard of medieval chessmen found at Uig on the Island of Lewis—now in the British Museum—there are fourteen knights on sturdy ponies as the largest group among the forty-six figurines.

The Metropolitan Museum owns three remarkable medieval chessmen, all knights, ranging from the thirteenth to the sixteenth century in date. Every one of them is extremely interesting and important as a repre-

sentative of a particular stage in the development of knightly armor.

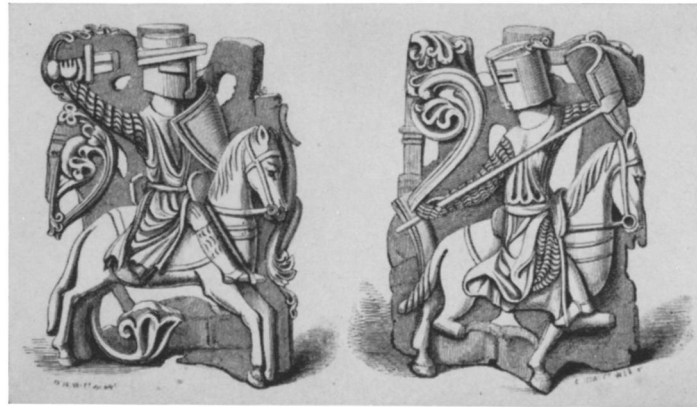
The first, of walrus ivory (Figure 1), is armored in the style of around 1250 (about forty years after Wolfram wrote his story), with large triangular shield and flat-topped helm, his mail hauberk covered by a fluttering surcoat. Though the equipment of knights of this period was fairly uniform throughout western Europe, this knight always has been called French, probably because of the elegance of his style; it is interesting, however, that one of the closest equivalents to his armor in sculpture is a statue of a knightly saint on the west front of Wells Cathedral that dates from about 1230 to 1240. His horse is rearing over a gruesome dragon, between whose gnashing teeth the point of the lance is still visible, though arm and lance shaft are now broken off. The tail of the dragon blends into a tangle of floral scrollwork like a suggestion of an enchanted forest from which the dragon slayer bursts forth on his quest. A chesspiece showing two knights pursuing each other through a similar thicket is in the Ashmolean Museum, Oxford (Figure 2); though apparently by the same carver, it must have belonged to a different set, since it is carved without a base. The National Museum of Antiquities of Scotland owns a rook (Figure 3) that represents two armored men on foot, back to back, peering out from similar scrollwork; the demi-fleur-de-lis on one of the shields has a decidedly north European, even Scandinavian, look, but the arms have defied identification so far.



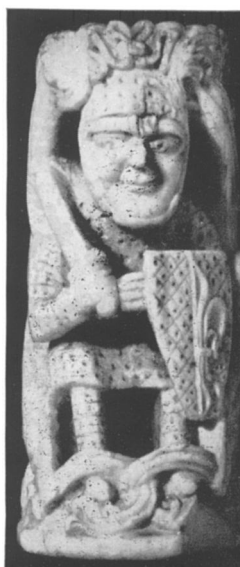


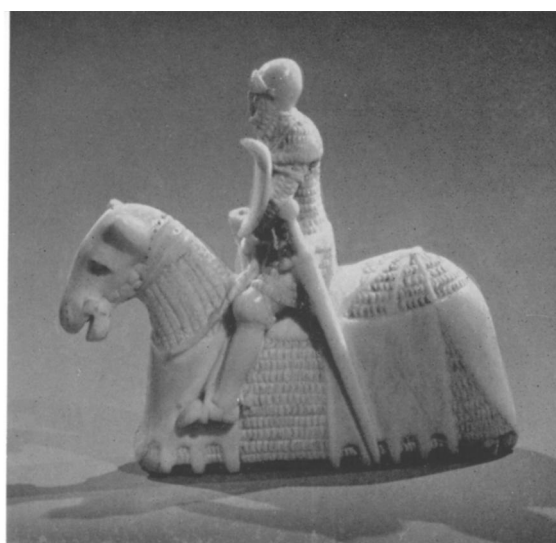
1. Chessman (knight). Probably French, about 1250. Walrus ivory, height $3\frac{1}{8}$ inches. Gift of J. Pierpont Morgan, 17.170.231. A reconstruction of this piece is illustrated at the top of page 174; the other drawings are reconstructions of Figures 4 and 20

2. Chessman (knight). Probably French, about 1250. Walrus ivory. Ashmolean Museum, Oxford. From "Ancient Chess-men with Some Remarks on Their Value as Illustrations of Medieval Costume" by Albert Way in *Archaeological Journal* 3 (1846)

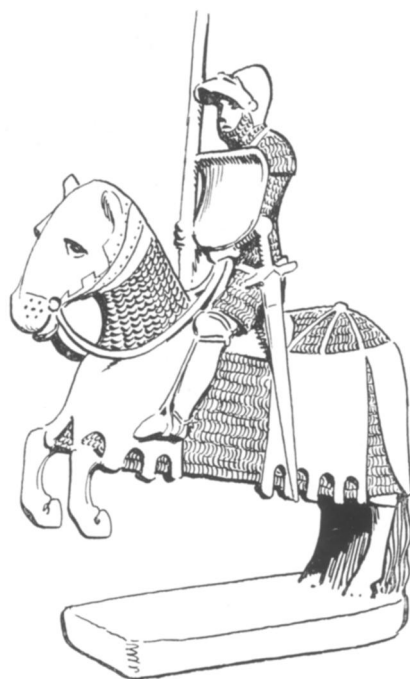


3. Chessman (rook). North European, about 1250. Walrus ivory. National Museum of Antiquities of Scotland





4. Chessman (knight).
English, about 1370.
Ivory, height $2\frac{3}{16}$ inches.
Gustavus A. Pfeiffer
Fund, 68.95



5. Reconstruction of Figure 4

6. *Sir Gawayne on the Magic Bed*,
detail of an ivory casket used as a
model for the reconstruction of the
visor in Figure 5. French, XIV
century. Gift of J. Pierpont Morgan,
17.190.173



Our second knight (Figure 4), solitary survivor of an otherwise vanished set, wears armor that can be dated to the second half of the fourteenth century. He wears a bascinet with raised visor, its camail covering his neck and shoulders; his body is protected by a hauberk of mail and by a large shield held by a strap slung over his shoulder. Gauntlets of typical "hourglass" form, knee cops, and greaves protect his hands and legs.

The armor of this knight shows, as mentioned in its first publication, 1846, a marked resemblance to the famous description of the arming of Sir Gawayne in *Sir Gawayne and the Green Knight*:

... they set the steel shoes on the strong man's feet,
Lapped his legs in steel with lovely greaves,
Complete with knee-pieces, polished bright,
And connecting at the knee with gold-knobbed hinges.
Then came the cuisses, which cunningly enclosed
His thighs thick of thew, and with thongs secured.
Next the hauberk, interlinked with argent steel rings
And resting on rich material, wrapped the warrior round.
He had polished armor on arms and elbows,
Glinting and gay, and gloves of metal,
And all the goodly gear to undergo what might Betide;
With richly wrought surcoat
And red-gold spurs to ride,
And sword of noble note
At his silken-girdled side.

Our little knight differs from this description in that he lacks a surcoat. This is a rather unusual feature, though not unique and not attributable to any specific region, since it occurs on representations in such widely separated places as Pistoia (on a silver altarpiece of 1376 in the cathedral) and Thann in Upper Alsace (on a statue of St. George at the minster portal).

The shield, an early form of the targe with U-shaped outline and concave face, is also peculiar; it has a nearly exact counterpart, however, on the brass effigy of Bishop Robert Wyvill (1375) in Salisbury Cathedral (Figure 7).

But the most remarkable feature of this figurine is the armor of the horse. Its head is completely enclosed in a chanfron, while its body is covered with a bard of mail coming down nearly to the fetlocks, and overhung by trappings that in the original were presumably of fabric or leather. We always imagine knightly steeds as being decked out in shining steel and fluttering caparisons, but among medieval representations before the fifteenth century relatively few show horse trappings that are actually armor rather than fabric. Practically all these examples come from northern France or England; perhaps it was the tactics of using the longbow in battle that made better protection for the horse desirable. (In other parts of Europe a knight was supposed to battle his peers, and it was against the code of chivalry to resort to so knavish a trick as mauling an opponent's horse.) One of the earliest representations of a fully mail-clad charger is to be found in the murals of the Painted Chamber, Westminster (Figure 11); others are to be seen in relief sculptures (Figures 12, 13) and in miniatures (Figures 14-17). It should be pointed out, however, that our ivory knight seems to be unique as a representation of man and horse in full armor sculptured in the round from the fourteenth century.

Most of the armored horses shown in contemporaneous documents do not wear full trappings of mail but only chanfrons, though these are sometimes half-hidden under fabric caparisons. These chanfrons are of a nearly

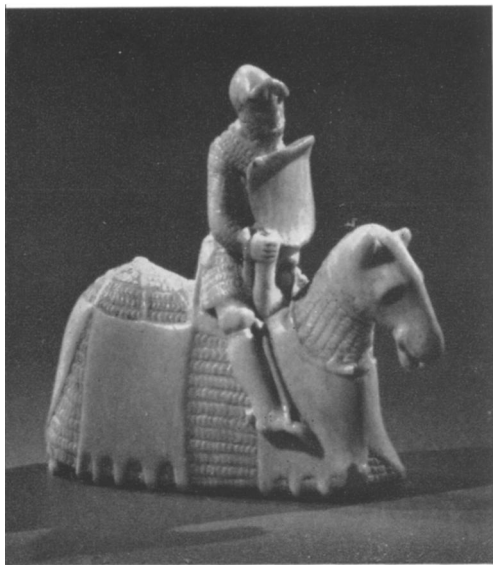
7. *Guardian*, detail of the brass effigy of Bishop Robert Wyvill (died 1375) in Salisbury Cathedral. From *The Monumental Effigies of Great Britain* (London, 1817) by C. A. Stothard



8. *Erroneous reconstruction of the chessman in Figure 4.* From "Ancient Chess-men" by Way; the same engraving appeared in *Ancient Armour and Weapons in Europe* (Oxford and London, 1855, 1860) by John Hewitt



9. *Plaster cast of the chessman in Figure 4.* Gift of Sir Thomas Brock, 11.88



10. The Museum's ivory chessman of about 1370

11. Armored horse, detail of a mural in the Painted Chamber, Westminster. English, late XIII century. From *Ancient Armour* by John Hewitt



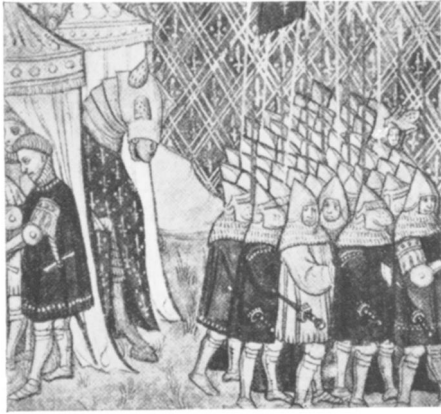
12, 13. Scenes from the Legend of the True Cross. Probably north French, about 1350. Stone reliefs, heights 19½ inches, 24½ inches. The Cloisters Collection, 25.120.529, 528



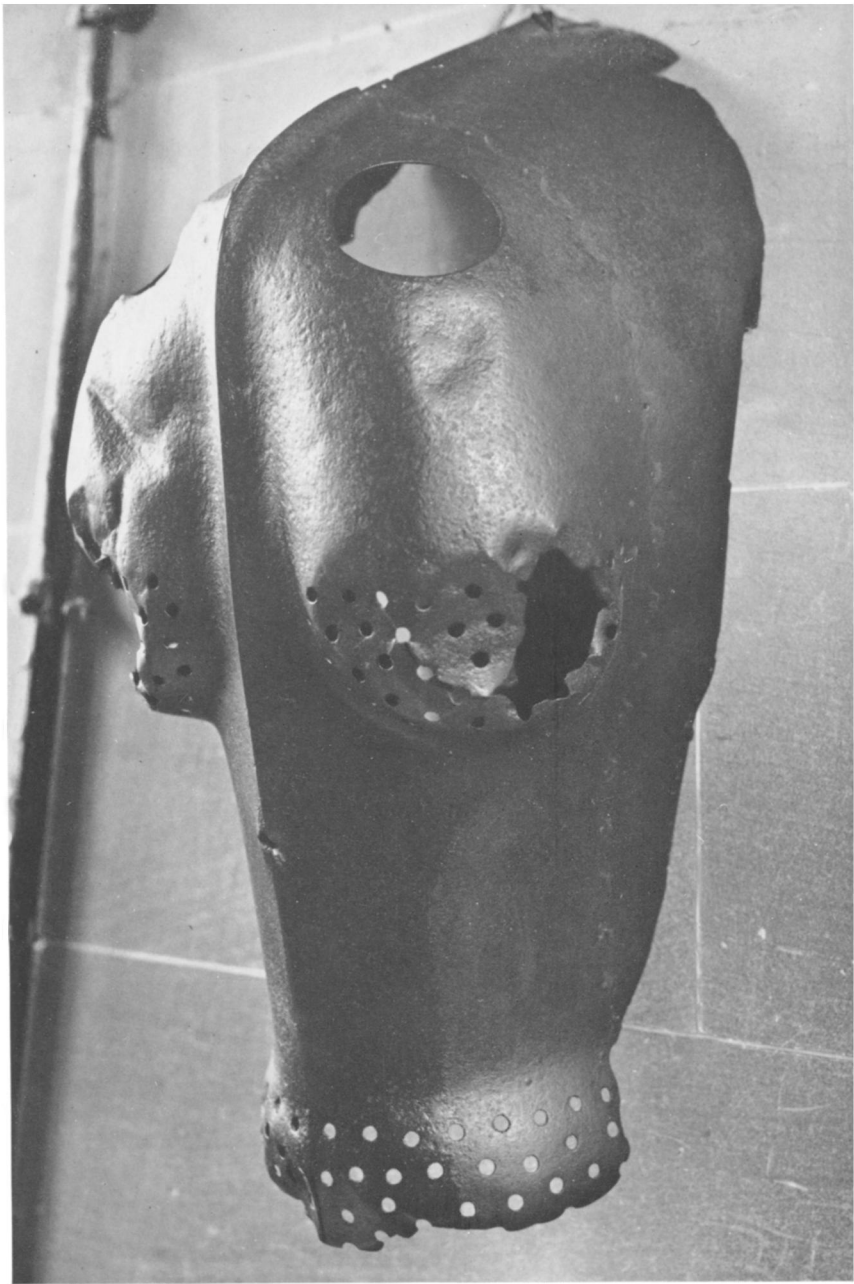
14. Miniature of a battle scene. English, third quarter of the XIV century. British Museum, Add. MSS 15477. From *A Record of European Armour and Arms 3* (London, 1920) by Sir Guy Francis Laking



15. Miniature of a camp scene, in *Hystoire de Roys de France après Philippe III.* French, about 1410. British Museum, Royal MS 20, C, vii, fol. 136. From *A Record of European Armour* by Laking
16. Miniature of St. Victor. French, before 1415. Bibliothèque Municipale, Châteauroux, MS 2, fol. 237. From *French Painting in the Time of Jean de Berry: The Boucicaut Master* (London and New York, 1968) by Millard Meiss



17. Miniature of the battle of Crécy. French, about 1415. British Museum, MS Cotton Nero E., II, II, fol. 152v. From *French Painting* by Meiss



18. Chanfron. English, second half of the XIV century. Collection of the Earl of Warwick, Warwick Castle. Photograph: John Wright

19. *Silvered and engraved armor of Henry VIII. Armor by Nicolaus da Silva (?), engraved decoration by Paul van Vreeland, horse bard Burgundo-Flemish. About 1520. The Armouries of H. M. Tower of London, II-5. Photograph: British Crown Copyright*



uniform type, differing only in the protection for the horses' eyes. Most of them – our chessman, too – have half cups overshadowing the eyeholes; others have perforated bulges similar to those protecting the nostrils. We know the first variety only from documents, but we are fortunate enough to have an original specimen of the second surviving in the famous chanfron in Warwick Castle (Figure 18). It was first published in 1786 as “an iron chanfron of uncommon construction said to have belonged to Guy, Earl of Warwick.” It is said to have been found in the moat of the castle; this would explain the damage it has suffered, such as loss of the ear covers and neck lames, and the corrosion of the weaker perforated parts. Except for the pierced eye protections it is in all details identical to the one on our figurine.

As might be expected from such a fragile material as carved ivory, our knight has suffered considerable damage too. Originally his weapons were a sword hanging from his left side, and a lance upright in his right hand. The lance is now broken off, leaving only a short stump. The carver apparently hoped to give firm support to the lance by attaching its shaft to the upper dexter corner of the shield and the visor's edge; when it broke off in spite of that, it took away small fragments from both these places. Later someone tried to replace the lance; this replacement is also lost, but the hole drilled to hold it is still visible in the knight's fist. Lost too are the feet of the horse and the base. The stumps left on the underside show that originally the horse was prancing (Figure 5); older reconstructions showed it walking (Figure 8). This damage, however, does not distract much from the appreciation of the carver's skill, particularly the charming way he made use of the natural curvature of his raw material, a section of an elephant's tusk, in order to give the horse's head and neck a lifelike tilt.

Our chessman was first published in 1846, when it was in the collection of the Rev. John Eagles. Even then it was recognized as a significant example of the armament of the fourteenth century, and copper engravings

20. *Chessman (knight). English, about 1520. Ivory, height 1 7/8 inches. Gustavus A. Pfeiffer Fund, 67.183*



of it (Figure 8) were repeatedly illustrated in handbooks. At some time during the nineteenth century – perhaps when it was in the famous collection of Victor Gay – plaster casts were made of it. Of these two are known: one is in the Tower of London, and the other in the Metropolitan Museum (Figure 9). Since this knight was regarded primarily as a historical document and only secondarily as a work of art, scholars were content to use these easily available casts for illustration instead of the original, which continued to stay in private hands. Around 1900 the original dropped out of sight, and it was an almost incredible stroke of good luck when it reappeared in the distinguished collection of John Hunt in Dublin, and we were able to acquire it for the Museum last year.

The third of our chessmen (Figure 20) comes from the same collection and, its somewhat battered condition notwithstanding, it is an important document for its period. Strangely enough, it has not been published before. The knight wears armor that can be dated around 1520; its peculiar mixture of Italian and German stylistic features is characteristic of the fashion at the English court in the time of Henry VIII. Indeed, it looks remarkably like the silvered armor of Henry VIII in the Tower of London (Figure 19). This famous suit was made by an Italian armorer, but it is fitted with a tonlet, a pleated skirt (the *Faltenrock* popular in Ger-



21. *Reconstruction of Figure 20*

many) copied after an armor made in Emperor Maximilian's court workshop at Innsbruck and presented to Henry by Maximilian in 1514. The silvered armor is enriched with engraved decoration, done by a Flemish artist, representing scenes from the legend of St. George, and the knightly saint is twice shown wearing armor and skirt of this type, though the skirts are meant to be of fabric. For tournaments and pageants these decorative skirts were often tied on like aprons over armor (this seems to be the case with our chess knight too); the metal version was an extravagance that only very few of the great

est lords sported (incidentally, two of the seven known examples are in the Metropolitan Museum).

As a Tudor, Henry VIII claimed King Arthur himself among his ancestors, and therefore it is not surprising that he was an enthusiastic lover of tournaments and pageants. Our chess knight is equipped for a joust; he probably belonged to a set representing one of the pageants that surrounded tournaments, such as the "Round Tables" in which the participants assumed the names of King Arthur's knights. Who knows? He might have been Sir Gawayne.

NOTES AND REFERENCES

I wish to express my thanks to the Right Hon. the Lord Brooke, Warwick Castle, for his kind permission to publish the Warwick chanfron in a photograph for the first time, and to my colleagues Claude Blair, Deputy Keeper of Metalwork, Victoria and Albert Museum, London, and William Reid, Assistant Keeper, The Armouries, H. M. Tower of London, for information and photographs.

Albert Way, "Ancient Chess-men with Some Remarks on Their Value as Illustrations of Medieval Costume" in *Archaeological Journal* 3 (1846), pp. 239-245, 6 figs.

John Hewitt, *Ancient Armour and Weapons in Europe* (Oxford and London, 1855, 1860), 1, p. 342; II, p. 314.

Charles ffoulkes, *The Armourer and His Craft* (London, 1912), p. xvii.

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Bashford Dean, *Handbook of Arms and Armor* (New York, Metropolitan Museum, 1915), pl. XIII.

Claude Blair, "The Emperor Maximilian's Gift of Armour to King Henry VIII and the Silvered and Engraved Armour at the Tower of London" in *Archaeologia* 99 (1965), pp. 1-56.

Charles K. Wilkinson and Jessie McNab Dennis, *Chess: East and West, Past and Present* (New York, Metropolitan Museum, 1968), fig. 7.

Millard Meiss, *French Painting in the Time of Jean de Berry: The Boucicaut Master*, National Gallery of Art: Kress Foundation, Studies in the History of European Art (London and New York, 1968), figs. 103 and 427, pp. 81-85, 92-95.

The Armorers' Shop

Captions by HELMUT NICKEL

Photographs by HELEN BUTTFIELD

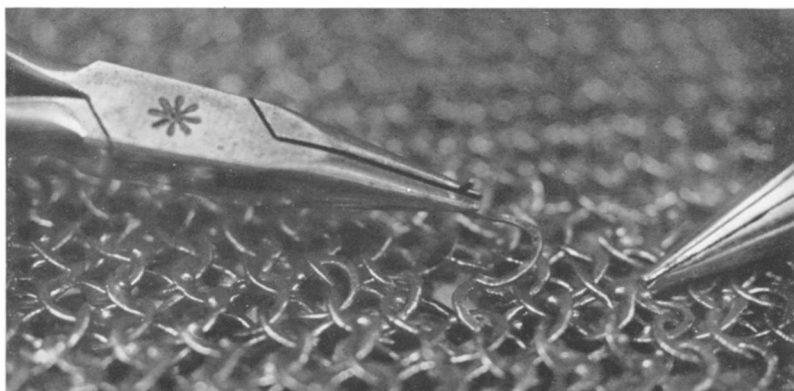
One of the more romantic features of the Metropolitan Museum is that it houses a real armorers' shop. Although its domicile is not in soot-blackened, high-vaulted Gothic chambers but in sober rooms like laboratories, many of the tools and techniques used are centuries old, and the smith is still faithful to fire, the element of Vulcan.

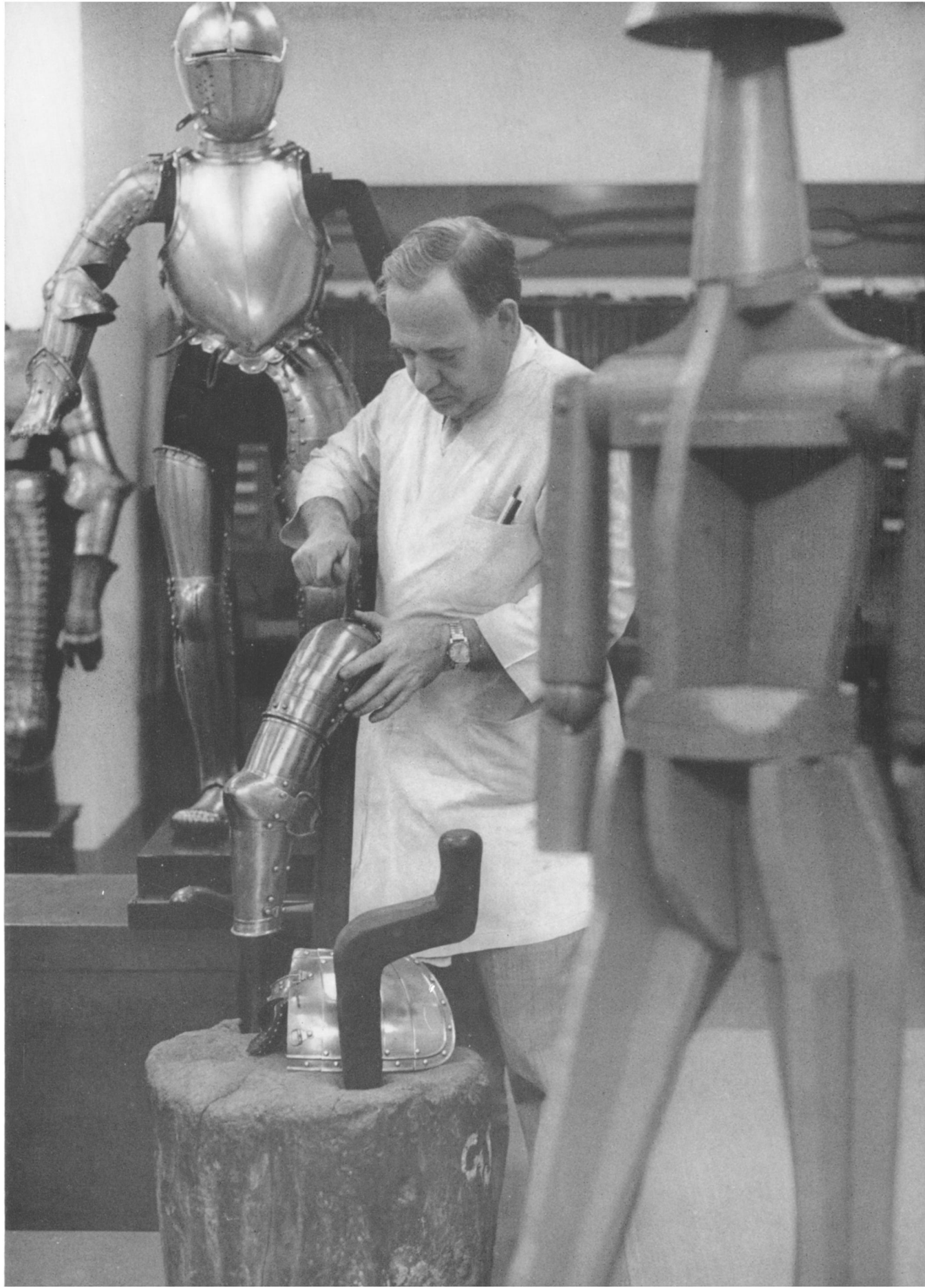




Armorer's work requires patience, knowledge of manifold techniques and materials, and a special touch, be it the measured stroke in polishing that gives a helmet or breastplate its prized luster or the untiring accuracy needed in caring for the 200,000 rings of a mail shirt.

At the right the Armorer is riveting the leather straps on a sixteenth-century boy's armor (both hammer and anvil stake are original tools, contemporaneous with the armor they help to repair), and at the left is illustrated the art of embossing, the most attractive technique used to decorate parade armor. The metal rests on a block of pitch, the yielding surface permitting the raising of prominent details with a punch. The actual embossing is done from the wrong side of the piece, but fine accents are chiseled in on the front.

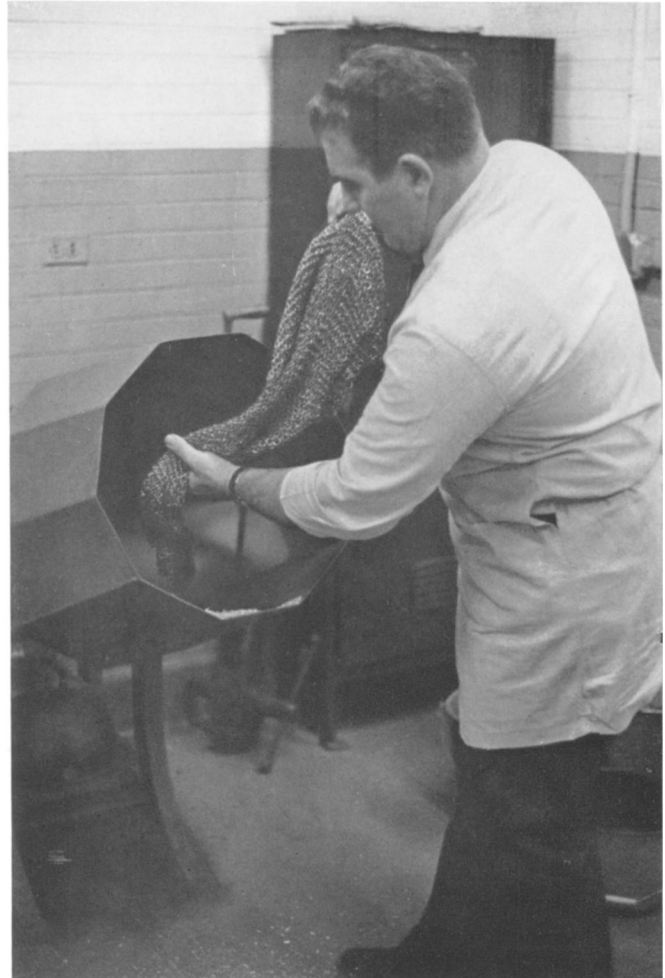




Most of a modern armorer's work is considerably less glamorous than that of his colleagues in the days of Lancaster and York. Now, above all, it is cleaning, keeping the polished surfaces and intricate hinges rust-free. The humidity and pollution of New York's air poses quite a problem to the caretakers of the largest armor collection in the Western Hemisphere. This means constant checking, even of objects safely in cases, but special attention must be given to armor exhibited openly in the galleries. Though an armor plate was designed to withstand a sword stroke or the impact of a crossbow bolt, it is extremely vulnerable to careless handling. If only the curious visitor knew how easily his fingerprints become permanently etched into the steel, if not discovered and removed within hours!



Above: the leatherbound wooden grip of a sixteenth-century rapier is being meticulously wrapped with cabled silver wire. Right: a hauberk is about to be cleaned in the medieval way—by tumbling it in a barrel with a few shovelfuls of sawdust sprinkled with oil.





One of our restorers is a trained gunsmith, the other a skilled silversmith. The Armorer himself, with the Museum for forty years, learned his craft from masters who were links in a chain of tradition that can be followed back to the Middle Ages practically step by step.



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