The Art of the Medieval Blacksmith

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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 permutable: 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

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Detail, actual size, of the iron lock shown on pages 164-167
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 shall 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 undoubtedly 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 fireplace 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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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 architectural 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 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.

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.


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

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.

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 7½ inches; escutcheon, height 6¾ 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 6⅜ inches; plate, diameter 2⅞ 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-tendril 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) 5⅜ inches. The Cloisters Collection, 55.61.44*
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_

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 20¾ inches; height of knocker figure 7 inches. The Cloisters Collection, 55.761.1_
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 3/8 x 14 3/4 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 26\(\frac{1}{2}\) inches. The Cloisters Collection, 55.61.46*