Pommels have been an essential component of swords and daggers since at least the third millennium B.C.¹ Though sometimes purely decorative, a pommel usually serves to keep the hand from sliding off the end of a weapon’s grip and acts as a counterweight to offset the blade, making a properly balanced sword or dagger feel light and maneuverable in the hand. As part of a weapon that was often worn or carried in a prominent position, the pommel was frequently decorated, sometimes in the round and very elaborately. Pommels can be made of gold, silver, bronze and other copper alloys, bone, ivory, horn, rock crystal, or iron. They can be wrought, chiseled, carved, or cast; embellished with a wide range of materials, including gold and silver, precious and semiprecious stones, and glass; and decorated in a variety of metalworking techniques such as gilding, inlay, damascening, chasing, chiseling, inset plaques, and enamels (both champlevé and cloisonné).

The basic components of a typical European sword or dagger from the early Middle Ages onward consist of a blade with an integral tang (a narrow, unsharpened iron shank that extends from the base, or shoulders, of the blade and is made in one piece with it), a guard, a grip, and a pommel. The last three elements—guard, grip, and pommel—are collectively referred to as the hilt. Each part of the hilt has a central opening through which the tang is inserted. Usually the tang is visible only when the sword or dagger is disassembled or its grip is missing. To fit the blade and hilt elements together, the guard is slid over the tang until it rests against the shoulders of the blade; the guard is followed by the grip, and finally the pommel. In most cases the tip of the tang protrudes from a hole at the top of the pommel and is peened, or hammered flat, locking the components of the hilt and the blade solidly together. In this way the pommel not only balances but also unites the entire weapon.

1. Detail of an illumination from the Morgan Picture Bible (fol. 33r), Old Testament miniatures, France, ca. 1250. The Pierpont Morgan Library, New York, Purchased by John Pierpont Morgan (1865–1943) in 1916 (MS M.638). The miniature shows the armor and weapons typical of the period of the Crusades. Note particularly the variety of sword and dagger pommels.

although many complete swords and daggers reside in public and private collections today, very few retain all of their original elements. In addition, detached pommels were regularly collected as individual pieces in the context of larger arms and armor collections; the Metropolitan Museum’s Department of Arms and Armor, for instance, includes more than 130 detached European sword and dagger pommels ranging in date from the ninth to the nineteenth century.

Included among these is a rare group of pommels that can be associated with the Crusades. The group is significant because although tens of thousands of European knights and men at arms took part in the nine Crusades that occurred between 1095 and 1272 and lived for generations in the Holy Land, very few weapons and only small fragments of armor survive today that can reasonably be connected to the Crusades (see Figure 1).

All the pommels under consideration here appear to be French and are attributable to the twelfth or thirteenth century on the basis of their known histories, style, and decoration. While some may be large enough for use as sword pommels, most appear more appropriate for mounting on daggers or knives. The nucleus of this study is a group of twenty-six pommels and one dagger, all but one of which are said to have been acquired by local dealers in and around Israel over a period of several years (Figures 2, 3, and see Figure 30). Most of these pieces have been on long-term loan to the Metropolitan Museum from the collection of Laird and Kathleen Landmann since 2007. Three closely related pommels also exist in the permanent collection of the Arms and Armor Department of the Metropolitan Museum (see Figures 4 and 10; the third is MMA 29.158.680). Working from this selection of pommels, which appears to be the largest of its kind, some initial observations can now be made regarding their types, decoration, materials, and origins.

The majority of these pommels take the form a disk with a deeply scalloped perimeter. They vary in size from about
Sword and Dagger Pommels

7\(\frac{1}{8}\) to 17\(\frac{7}{8}\) inches (2.1 to 4.8 cm) in diameter, and 7\(\frac{1}{8}\) to 7\(\frac{7}{8}\) inches (1 to 1.6 cm) in depth, and the number of scallops ranges from twelve (on the larger pommels) to eight (on the smaller examples). Many have decoration highlighted in champlevé enamel that features heraldic animals and insignia and floral and other motifs. They are thick walled, but hollow cast rather than solid.

Also included in the group, but fewer in number, are pommels that are lozenge shaped, with a distinct medial ridge running from top to bottom; pierced pommels that are crownlike in shape; a crescent-shaped pommel; a pommel in the form of a cross fleury; and a dagger with a cross fleury pommel. In 2007 two of the pommels—a scalloped disk and a lozenge type—were examined using X-ray fluorescence spectroscopy (XRF). In 2011 the entire group was analyzed in greater detail by Pete Dandridge and Mark Wypyski, with interesting results (see Part II).

Standing apart from this group in terms of its shape, but extremely important as perhaps the best example of a thirteenth-century pommel bearing Crusader heraldry, is a sword pommel in the Metropolitan’s collection decorated in champlevé enamel with the coat of arms of Pierre de Dreux, called Mauclerc (1191–1250), duke of Brittany and Earl of Richmond (Figure 4). Dreux was captured, along with King Louis IX of France and several other high-ranking noblemen, at the battle of al-Mansura in Egypt on February 8, 1250, during the Seventh Crusade. Sometime after the battle, he was ransomed and released, but he died during the return journey to France. Pierre de Dreux’s tomb effigy, now lost but well recorded in a seventeenth-century engraving (Figure 5), shows him in armor and equipped with a sword fitted with a pommel very similar, if not identical, to this one, including the heraldic decoration, which is rendered more fully on the duke’s shield. The Museum’s pommel is made of almost pure copper, with traces of gold and mercury indicating that it was gilt overall in the areas not covered by the enameling. Like most of the pommels in the group under study, this example was acquired in former

3. Reverse sides of the sword and dagger pommels in Figure 2
There are nineteen scalloped disk pommels in the Landmann group and one (see Figure 10) among the related works in the Museum’s permanent collection. On each of these the individual scallops bordering the perimeter are decorated with a small trefoil motif, while the center bears one of a variety of symbols, some of which are clearly heraldic. Only one of these heraldic symbols is tentatively identifiable at this time, however. The pommel it appears on (Figure 6) is decorated in champlevé enamel on one side with a Toulouse cross, which was the emblem of the counts of Toulouse, who ruled Tripoli, one of the major Crusader states, from 1109 to 1289. The coat of arms on the reverse consists of a shield with a blue chevron, six-pointed stars in the upper right and left corners, and a teardrop motif in the center of the lower portion, beneath the chevron. This presumably constitutes the arms of one of the counts, a member of their family, or one of their retainers.

Another of the Landmann scalloped pommels (Figure 7) bears a crowned lion passant-gardant with traces of blue, red, and white enamel. On the reverse is a shield charged with nested chevronels (chevronny) alternating in blue enamel and bare metal, with the borders further highlighted in red and blue enamel. Very similar crowned lions passant-gardant are found on other pommels in the group, although each of these objects has a different emblem on the reverse. One Landmann pommel (Figure 8) has a shield with a field bendy, or a series of eight diagonal lines, or bendlets, on which there are traces of colored enamel. Another example with the same decoration front and back was until recently in the Rockefeller Archaeological Museum in Jerusalem (Figure 9). One of the three Metropolitan Museum pommels (Figure 10) shows a shield with a lion passant on a bend azure. Two more examples that were acquired in Beirut by Gustave Schlumberger (1844–1929), the noted French numismatist and historian of the Crusades, are in the Musée de Cluny, Paris. On one (Figure 11) the lion is nearly identical in its form and details to the lion in Figure 7. The reverse bears a triangular shield charged with a tree formed of three symmetrically arranged leafy branches. On the other Cluny pommel (Figure 12) the lion is leaner and more anatomical, its tail is more elaborate, and its crown shows three distinct tines. The reverse has a variation of the triple-towered castle design that decorates some of the Landmann pommels. The Musée de l’Armée, Paris, owns another lion passant-gardant pommel (Figure 13) that might be associated with the Crusades. It is said to have been found in a tomb in Charente, in the Poitou region of western France. Charente was part of the duchy of Aquitaine, ruled in the twelfth century by Eleanor of Aquitaine (1122–1204), who accompanied her
6. Pommel with a Toulouse cross (obverse), probably that of the Saint-Gilles family, which ruled as counts of Tripoli from 1102 to 1289, and a coat of arms (reverse). Probably French, 12th–13th century. Copper alloy and enamel, Diam. 1⅜ in. (4.1 cm). The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2007 (L.2007.86.7)

7. Pommel with a crowned lion passant-gardant (obverse) and a chevronny design (reverse). Copper alloy, enamel, and iron; Diam. 1⅜ in. (4.8 cm). Probably French, 12th–13th century. The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2007 (L.2007.86.8)

8. Pommel with a crowned lion passant-gardant (obverse) and a bendy design (reverse). Probably French, 12th–13th century. Copper alloy and enamel, Diam. 1⅜ in. (3.8 cm). The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2007 (L.2007.86.6)

9. Pommel with a crowned lion passant (obverse) and a shield with a field bendy (reverse). Probably French, 12th–13th century. Formerly Rockefeller Archaeological Museum, Jerusalem. Present location unknown

10. Pommel with a crowned lion passant-gardant (obverse) and a lion passant on a bend azure (reverse). Probably French, 12th–13th century. Copper alloy and enamel, Diam. 1⅜ in. (4.1 cm). The Metropolitan Museum of Art, Bashford Dean Memorial Collection, funds from various donors, 1929 (29.158.685)

11. Pommel with a crowned lion passant-gardant (obverse) and a tree within a shield (reverse). French, 13th century. Copper alloy and enamel, Diam. 1⅜ in. (4.1 cm). Musée National du Moyen Âge–Thermes et Hôtel de Cluny, Paris (CL.21584)
12. Pommel with a crowned lion passant-gardant (obverse) and a triple-towered castle (reverse). French, 13th century. Copper alloy and enamel; Diam. 1¾ in. (4.8 cm). Musée National du Moyen Âge–Thermes et Hôtel de Cluny, Paris (CL.21583)

13. Pommel with a crowned lion passant-gardant (obverse) and an indistinct heraldic shield (reverse). French, 12th–13th century. Copper alloy and enamel, Diam. ca. 1¾ in. (4.8 cm). Musée de l'Armée, Paris (JPO 1374)

husband, Louis VII (1121–1180), to the Holy Land during the Second Crusade (1145–49). Their entourage included many noblemen from Eleanor’s own lands.¹³

Two of the Crusader pommels in the Landmann group are adorned with a distinctive triple-towered castle or citadel.¹⁴ The obverse of the first (Figure 14) is very similar to the reverse of the Cluny example in Figure 12; it shows on its reverse a shield charged with a concentrically coiled leafy vine or branch. On the reverse of the other (Figure 15) is what appears to be a stylized tree with symmetrically spread branches. Two pommels of this type, with the triple-towered castle design, were illustrated and discussed in nineteenth-century publications. One bears on its reverse a shield charged bendy (as on Figure 8), the other, a griffin passant. The first (now lost) was purchased in about 1873 by the French archaeologist Charles Clermont-Ganneau (1846–1923) from a goldsmith in the bazaar in the Palestinian city of Nablus.¹⁵ The pommel with a griffin (Figure 16) is in the Musée de Cluny and was also acquired by Gustave Schlumberger, who described it as “having been sent to him from Syria . . . , found in the sands near the sea, in the vicinity of Saïda, the former Sidon, Sagète, Sayette, or Sagette of the period of the Crusades.”¹⁶

The leading expert of the day on coinage and seals of the Crusading era, Schlumberger pointed out that the triple-towered castle emblem was perhaps the most commonly used insignia in the Holy Land and could be found on the coinage of Henry II of Cyprus, the counts of Tripoli and Ibelin, the lords of Baruth, Monfort, and Toron, the princes of Tyre, the counts of Arsur and Jaffa, and others.¹⁷

In 1881 Clermont-Ganneau obtained another pommel of the scalloped disk type in Jerusalem. Its present whereabouts are unknown, but an 1885 reproduction indicates that it was virtually identical in form and decoration to one of the Landmann pommels (Figure 17).¹⁸ The center of the obverse displays a motif that may represent a tree with spread branches, or perhaps a stylized image of a descending bird with spread wings, possibly emblematic of the Holy Spirit in the form of a dove, a familiar image in Christian art that is mentioned in various passages of the New Testament, including all four Gospels.¹⁹ The design on the reverse can also be interpreted as a stylized descending dove. A smaller pommel in the group (Figure 18) has the same images on its obverse and reverse.²⁰

The last of the larger twelve-lobe scalloped pommels in the Landmann group (Figure 19) matches the others in form, scale, and design, but it is the sole example with the same decorative motif on both sides, in this case a heraldic shield charged with narrow vertical stripes (paly) alternately decorated with blue enamel. This pommel is also different in that, unlike the others, it was reportedly found in Bristol, England, rather than the Holy Land.

Two of the small scalloped disk pommels (Figure 20) are decorated with a spread eagle looking left.²¹ Of the eight remaining small scalloped disk pommels, three bear indistinct stylized animals (Figure 21), two (Figure 22) show a curled-leaf motif perhaps related to that on the reverse of the triple-towered castle pommel (Figure 14), and two have a version of the spread-branches motif (Figure 23).

Each of the scalloped disk pommels has a square or rectangular hole in the center of its bottom edge and a corresponding but smaller round hole at the top to accommodate the tip of the tang. Portions of tang, impacted and rusted in place, remain in several of the pommels.²² In addition, three of them have another small, round hole one-third to one-half of the way up from the bottom on one side, perhaps to anchor the end of a retaining chain or wrist cord.²³

Three of the lozenge-shaped pommels in the Landmann group are notable for their unusual figural ornament. Two (Figure 24) are incised with a simple but lively image of a
14. Pommel with a triple-towered castle (obverse) and a shield charged with a curled vine motif (reverse). Copper alloy and enamel, Diam. 1 ¼ in. (3.5 cm). The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2007 (L.2007.86.23)

15. Pommel with a triple-towered castle (obverse) and a treelike motif (reverse). Probably French, 12th–13th century. Copper alloy, enamel, and iron; Diam. 1 ½ in. (2.9 cm). The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2007 (L.2007.86.18)


17. Pommel with what might be a tree with spread branches or a descending dove (obverse and reverse). Copper alloy, enamel, and iron; Diam. 1 ½ in. (3 cm). The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2007 (L.2007.86.13)

18. Pommel with what might be a tree with spread branches or a descending dove (obverse and reverse). Copper alloy and enamel, Diam. ¾ in. (2.3 cm), D. ¾ in. (1.1 cm). The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2007 (L.2007.86.14)

griffin passant and a crowned lion passant, respectively; and both have the same form of fleur-de-lis, with a knop and flared foot as the base, incised on the reverse. On the third (Figure 25), a man and woman stand facing each other, each with one arm akimbo and the other bent at the elbow and raised; their pale, off-white skin and blue clothing are rendered in champlevé enamel. The reverse of this pommel bears a representation, almost certainly heraldic, of a curved hunting horn with a looped-and-tasseled suspension cord executed in red champlevé enamel. A fourth Landmann lozenge pommel is decorated with a simply incised cross pattée concave (L.2007.86.26; Figure 2, bottom row).

Three pommels in the group are of differing shapes. One (Figure 26) is essentially heart shaped with a short tab or post extending from the center top. It is decorated on both sides with a griffin passant, possibly beneath a patriarchal cross, and has traces of enamel. Another, once forming a crescent but now missing one horn (Figure 27), has a tightly scrolling leafy vine on one side and an unreadable pattern
19. Pommel with a heraldic shield charged with narrow vertical stripes (paly) alternately decorated with blue enamel (obverse and reverse). Copper alloy and enamel; Diam. 1 3⁄8 in. (3.5 cm), D. 3⁄8 in. (1.1 cm). The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2011 (L.2011.47)

20. Two pommels with a spread eagle looking left on the obverse. Probably French, 12th–13th century. Copper alloy, enamel, and iron (right only); left: Diam. 1 in. (2.5 cm), D. 3⁄8 in. (1.1 cm); right: Diam. 3⁄4 in. (2.3 cm), D. 3⁄8 in. (1 cm). The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2007 (L.2007.86.12, 21)

21. Three pommels with stylized animals. Probably French, 12th–13th century. Copper alloy, enamel, and iron; left: Diam. 1 in. (2.5 cm), D. 3⁄8 in. (1.1 cm), center: Diam. 3⁄8 in. (2.2 cm), D. 3⁄8 in. (1.1 cm), right: Diam. 1 in. (2.5 cm), D. 1⁄2 in. (1.3 cm). The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2007 (L.2007.86.11, 15, 20)

22. Two pommels with a curled-leaf motif perhaps related to that on the reverse of the triple-towered castle pommel (Figure 14). Probably French, 12th–13th century. Copper alloy, enamel, and iron (right only); left: Diam. 3⁄8 in. (2.2 cm), D. 3⁄8 in. (1.1 cm), right: Diam. 3⁄8 in. (1.9 cm), D. 1⁄2 in. (1.3 cm). The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2007 (L.2007.86.17, 19)

23. Two pommels with a spread-branches motif. Probably French, 12th–13th century. Copper alloy, enamel, and iron (right only); left: Diam. 3⁄8 in. (2.2 cm), D. 3⁄8 in. (1.1 cm), right: Diam. 3⁄8 in. (1.9 cm), D. 3⁄8 in. (1.1 cm). The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2007 (L.2007.86.9, 10)
24. Two lozenge-shaped pommels. Probably French, 12th–13th century. Copper alloy, enamel, and iron (right only); left, with a griffin passant (obverse) and a fleur-de-lis (reverse); 2 x 1 ¼ in. (5.1 x 3.2 cm), right, with a lion passant (obverse) and a fleur-de-lis (reverse); 1 ¾ x 1 ¾ in. (4.8 x 2.9 cm). The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2007 (L.2007.86.2, 4)

25. Lozenge-shaped pommel with a man and woman (obverse) and a curved hunting horn with a looped-and-tasseled suspension cord (reverse). Probably French, 12th–13th century. Copper alloy, enamel, and iron; 2 ¼ x 1 ¼ in. (5.4 x 3.5 cm). The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2007 (L.2007.86.3)

26. Heart-shaped pommel with a griffin passant (obverse and reverse). Probably French, 12th–13th century. Copper alloy and enamel; 1 ½ x 1 in. (3.8 x 2.5 cm). The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2007 (L.2007.86.24)

27. Crescent-shaped pommel with a scrolling leafy vine (obverse) and a now-illegible pattern (reverse). Probably French, 12th–13th century. Copper alloy and enamel; W. 1 ½ in. (3.5 cm), D. ½ in. (1.3 cm). The Metropolitan Museum of Art, Lent by Laird and Kathleen Landmann, 2007 (L.2007.86.5)
The last pommel is in the form of a pierced crownlike block (Figure 28). It displays a long-necked bird on one face and a shield decorated with diagonal lines (bendy sinister) on the other, and on each of the side edges a shield divided per saltire, or in an X pattern.

One of the detached pommels (Figure 29) and the pommel on the only dagger in the group (Figure 30) are in the form of an open cross fleury. The detached pommel is decorated on both sides with a simple starburst motif. The pommel on the dagger is worn but appears to have a descending bird on both sides. Although now heavily corroded and missing its grip, the dagger retains its key elements—pommel, guard, and blade—and therefore gives a good impression of the way most of the pommels in the group would originally have been used.

Taken together, these pommels constitute the largest and most distinctive group of objects relating to European arms and armor that can be convincingly connected with the Crusades. The key elements of the group as identified here include the Landmann pommels, the ex-Schlumberger pommels in the Musée de Cluny, the pommels formerly in the Kofler-Truniger and Keir collections specifically identified as acquired in Jerusalem, and the pommels once owned by Clermont-Ganneau. It is reasonable to accept that all these objects were made in France and taken to the Holy Land in the twelfth or thirteenth century during the course of the Crusades. Not only are these works rare and important as the remains of Crusader arms, but the decoration of many of them offers potential insights into the early development and use of heraldry. Given the stylistic similarity of most of the pommels, further identification of their heraldic decoration with a particular individual or individuals may eventually allow them to be dated to a much narrower time span, if not to a specific Crusade.
2. A similar group of twelve pommels were in the collection of E. and M. Koller-Truniger, Lucerne (Schnitzler, Bloch, and Ratton 1965, nos. E66–76), and were later sold as part of the Keir collection (Sotheby’s, New York, November 20, 1997, lots 99–101). Seven of the pommels in the Koller-Truniger catalogue are listed as having been found in Jerusalem. Two of the pommels, plus a dagger with a pommel of the same type, also from the Koller-Truniger collection, were acquired by the Furusiyya Art Foundation (see Noël Adams in Scalini et al. 2008, nos. 21, 22, 33).
3. The form corresponds generally with pommel type Q in Oakeshott 1964, p. 99, fig. 68.
4. For related examples of the last three types, see Adams in Scalini et al. 2008, nos. 21, 20, 22. The crescent-shaped pommels are reminiscent of Oakeshott’s type O (1964, p. 99, fig. 67).
5. The tests were carried out on MMA L.2007.86.7 (Figure 25) by Mark Wypyski, MMA Department of Scientific Research, in October 2007.
6. For a concise discussion of this pommel, see Stuart W. Pyhrr in Cardini 2004, p. 175, no. 1, and Grancsay 1939, pp. 211–13.
7. See Guibert 1911–14, pl. 1.277, and Adhémar 1974, p. 49, fig. 230.
8. Based on analysis by Mark Wypyski (report of July 26, 2004). For further analysis, see Part II.
9. On Raymond of Saint-Gilles, count of Toulouse (ca. 1041–1105), and his efforts to found the County of Tripoli in Lebanon, see Runciman 1952, especially pp. 56–61, and Boas 1999, pp. 2–4, 42.
10. The Rockefeller pommel is cited by Boas (1999, p. 174), but its present whereabouts are unknown.
12. Gay 1928, p. 254 (it was then in the Pauilhac collection, Paris). I am grateful to Jean-Paul Sage-Frenay of the Musée de l’Armée for information about this pommel’s reported provenance (personal communication, August 10, 2010).
14. Examples elsewhere include three from the Koller-Truniger collection (Schnitzler, Bloch, and Ratton 1965, nos. E66, E68, E75) and a pommel mounted on a sword sold at Sotheby’s Olympia, London, December 5, 2002, lot 50. One of the pommels (E68) and the sword are now in the Furusiyya Art Foundation (Adams in Scalini et al. 2008, nos. 12, 22). The pommel on the sword, however, is significantly cruder in its execution than any of the other pommels in this study.
15. In addition, Clermont-Ganneau (1896, pp. 321–23) cites the Schlumberger pommel with a griffin and mentions seeing another with the same triple-tower and griffin decoration in the collection of M. Gay in Paris.
16. “Séance du 6 Mars: Travaux,” Bulletin de la Société Nationale des Antiquaires de France, 1878, pp. 75–77: “M. Schlumberger donne les détails suivants au sujet d’un pommeau de dague du Xille siècle, qui lui a été envoyé de Syrie et qui a été trouvé dans les sables, au bord de la mer, aux environs de Saïda, l’ancienne Sidon, la Sagète, Sayette ou Sagette de l’époque des croisades.” It has been suggested that the Cluny pommels may have been made in the Middle East, rather than imported from Europe (Blasco et al. 2011, p. 118). This may be the case with the griffin pommel (Figure 16), which differs slightly in quality, form, and style of decoration. The other two Cluny pommels (Figures 11, 12), however, match the rest of the group so closely that they were almost certainly also made in France in the twelfth or thirteenth century.
17. Blasco et al. 2011, p. 76. For examples on seals of the type known to Schlumberger, see Schlumberger and Blanchet 1914, pls. V no. 25, XXI nos. 10, 17, 19, and XXII no. 12; and Schlumberger, Chalandon, and Blanchet 1943, pls. VI nos. 2, 3, XV no. 1, XVII nos. 1–4, 7, 8, and XIX nos. 5–7.
18. Clermont-Ganneau [1885], p. 171, no. 22, ill.
20. Another pommel of this type, with the tree or Holy Spirit motif, is found on a dagger formerly in the Koller-Truniger collection and now in the Furusiyya Art Foundation (R-423; Adams in Scalini et al. 2008, no. 33).
21. Another, with a triple-towered castle on its opposite side, is shown in the Keir collection sale catalogue (Sotheby’s, New York, November 20, 1997, p. 143, lot 101).
23. MMA L.2007.86.8, 16, 23. But see also Part II for the suggestion that these holes were for a core pin or plug, part of the casting process when the pommels were made.
24. The original form of this pommel may have been similar, if not identical, to Koller-Truniger pommel E71, now in the Furusiyya Art Foundation (R-621; Adams in Scalini et al. 2008, no. 22).
25. Another pommel of this same form is MMA 29.158.680. A pommel in the Furusiyya Art Foundation (R-620; ibid., no. 21) appears to be a cut-down version of L.2007.86.25 (Figure 28). The truncated form of the Furusiyya example may be the result of casting flaws or modifications due to damage.
26. The only exception would be arrowheads, which have been excavated in great numbers at a few Crusader sites. For the best overview of extant European and purportedly European arms and armor connected with the Crusades, see Boas 1999, especially pp. 170–80.
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