THE DECORATION OF FIREARMS IN THE SIXTEENTH AND SEVENTEENTH CENTURIES

by J. F. Hayward

Decoration first becomes a significant feature of firearms towards the middle of the 16th Century. Before this date neither matchlocks nor wheel locks received more than a minimal amount of ornament. The reason is that matchlocks were mostly carried by the common soldier while wheel locks were not yet established as entirely reliable and acceptable weapons. Even the short carbines and pistols made for the Emperor Charles V, now in the Real Armeria at Madrid, which date from the fourth and fifth decades of the Century, are with few exceptions, unornamented or only slightly ornamented. Evidence for the lack of trust in the mechanism can be found in the frequency with which, during the first two or three decades after its introduction, the wheel lock was built into a combination weapon of some sort: a mace-sword or dagger pistol.

It is the natural bent of man to adorn the artifacts he makes and decoration was from the mid-16th century applied with increasing skill and precision. So elaborate was the decoration of some firearms that they can hardly have been intended for use. Examination of highly decorated pieces confirms this impression. They have, in fact, never been fired. They were intended for the collections of works of art that were the pride of the European princes of the Renaissance. Many were made by court artists who worked exclusively for the European monarch, or members of their courts. One could quote many examples. One of the best-known in the suite of wheel locks and their accessories made for the Wittelsbach Duke, Maximilian of Bavaria, by his court craftsmen, Emanuel and Daniel Sadeler, in the early years of the 17th Century. These were placed in the Kunstkammer (art collection) of the Duke in Munich and then subsequently given as a present to the Duke of Savoy, who in turn kept them in his own art collection. They all remain in the Armeria Reale in the former Royal Palace at Turin, with the exception of the musket rest, which is in the Vienna Waffensammlung. Production of such weapons, intended to serve as rich presents, continued into the 19th Century. Amongst impracticable firearms can be cited the wheel lock rifles by Michael Maucher of Schwaebisch-Gmund with stocks inset with ivory plaques carved in high relief. In an English private collection is a pair of French mid-19th Century duelling pistols with ivory furniture carved and pierced in the Gothic Revival style with such delicacy that they are too fragile for use.

The decorator of firearms has a difficult problem as he is very much limited by functional considerations. The spaces available for decoration, particularly on a pistol, are small and awkwardly shaped. The decorator cannot alter them to suit his plan of ornament. Whereas an artist decorating a silver vessel can design it in the round and give it a sculptural form, a pistol butt or gun-stock cannot be treated so freely without interfering with its functional efficiency. Although the finest weapons were rarely used, they were made in such a way that they could be fired, so the decorator did not have a completely free hand. As a rule decoration was confined to the surface, that is to say, carried out in the flat or in low relief. Here again there were exceptions, of which the most obvious are the Dutch ivory pistol butts carved in the round with Roman helmeted heads.

If one studies a fine German wheel lock gun of the 16th or early 17th Centuries, one gets the impression that the gunmaker was almost a universal genius, so many are the techniques of manufacture and ornamentation represented on it. To produce a gun or pistol, three different artisans are required – a barrel forger and borer for the barrel, a lock filer for the lock and a stock-maker for the wood stock. These three can manufacture the undecorated firearm but many other crafts are involved when it comes to be decorated. The iron or steel parts can be treated in five different ways. They can be (1) chiselled and/or pierced with low relief ornament; (2) etched with acid to produce a pattern in even lower relief (see figure 1); (3) engraved with the burin (4) gilded or (5) damascened with gold or silver. This damascening can be carried out in two different ways, either false damascene, in which wire or foil of precious metal is hammered on to a hatched surface and then shaped to a pattern, or true damascene in which the precious metal is sunk into grooves cut into the metal. If the barrel, lock-plate and/or mounts are of brass, bronze or silver, then three further craftsmen are necessary.

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Figure 1. Etched ornament: Saxon wheel lock double barreled pistol, the stock of iron etched all over with hunting scenes and, opposite the lock, with the arms of Saxony with lion supporters. About 1580/90. Odescalchi Coll. Rome

First the pattern-carver who produces an exact model in pear or limewood from which are taken the casting molds; (2) the founder who casts the mounts or lock-plates in the molds and (3) the chaser, who receives the castings in the rough and cleans off the ridges left where the molds joined, and works over the whole surface to sharpen up the detail. The wood stock may be treated in many different ways, carved in relief, veneered with other woods such as ebony or palisander or other materials such as staghorn, ivory, or tortoiseshell. It can be inlaid with gold, silver, brass, copper or iron wire or overlaid with plaques of precious metal, or inlaid with staghorn or, more rarely, with ivory. If inlaid with white horn then the horn was finished with engraved designs (figures 2 and 3) and sometimes colored as well. One last technique to be mentioned is that of painting. This is a rare treatment but the inventory of the Louis XIII Cabinet des Armes refers to several painted stocks and a few decorated in this way still survive.

I have now listed sixteen different processes, which would not, of course, all be found on the same firearm, but another remains to be mentioned. If a gun or pistol was to receive elaborate ornament, a designer was required who would work out a scheme that was appropriate for the whole weapon. In the 16th Century ornament drawn from classical Roman history or mythology was popular, but the average gunmaker did not possess the necessary education to be able to work out a consistant program of ornament or to provide his figures of gods, heroes or virtues with their appropriate attributes. One can, therefore, assume that for every fine firearm that was made, some artist must have produced a design to which the various artisans worked. This was probably one of the masters who designed sheets of engraved ornament such as Virgil Solis, Jost Amman, or Paul Vlindt, all of whom worked at one time or other in Nuremberg.

It follows from the above that finely decorated firearms were the result of the co-operation of many different draftsmen. They did not work in a single workshop. In order to employ so many craftsmen, a gunmaker would have had to be quite a capitalist. In addition, the guild system prevented this practice. One of the purposes of the craft guilds was to maintain equality between their members, and the number of journeymen and apprentices that might be employed by one master was exactly defined – probably not more than two of the former and one of the latter. Richly ornamented firearms could, therefore, only be produced if the work of decoration was put out by the gunmaker to various specialists. The less richly ornamented firearms might be produced in the gunmaker's shop, as the stocker might have learned to inlay and engrave staghorn, but the higher the quality of the piece, the larger the number of specialists likely to have been engaged upon it.

As a rule the gunmaker was not an artist. If he had to design an arm himself, he would turn to a pattern book of engraved designs for ideas which he might copy. Many of these were produced in the 16th century in the cities of south Germany and Austria particularly in Augsburg, Nuremberg, and Vienna. These pattern books were not, however, specifically intended for gunmakers and did not, therefore, fit the spaces available on a wheel lock gun or pistol. The gunmaker or stocker

Figure 2. Inlaid ornament: German wheel lock pistol, the wood stock profusely inlaid with figures, animals and monsters in engraved staghorn. Nuremberg mark, about 1580. Wallace Coll. London

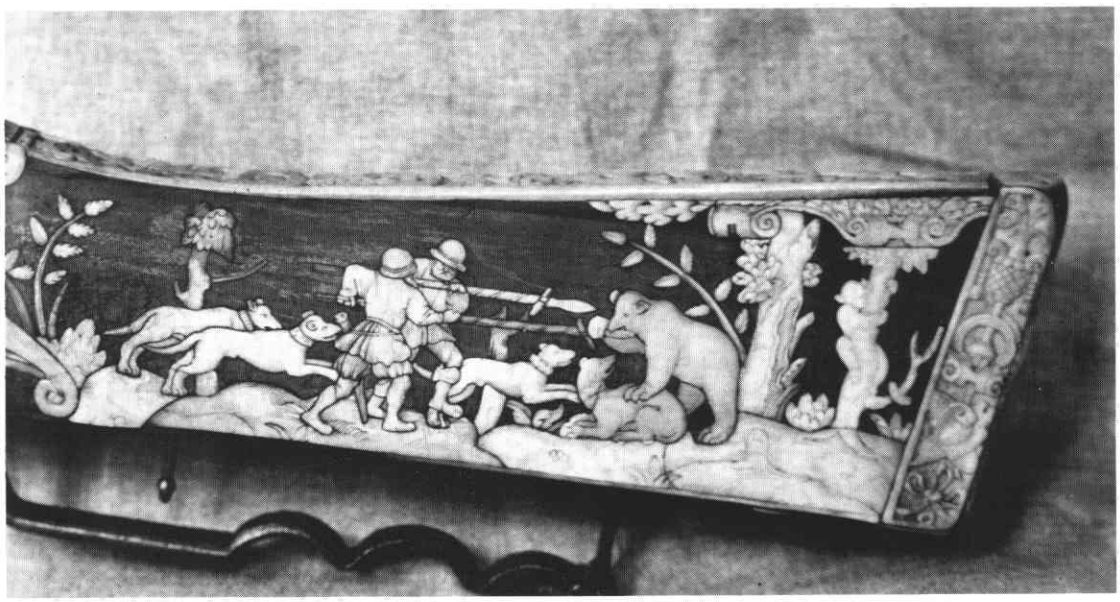


Figure 3. Carved and inlaid ornament: Butt of South German wheel lock rifle dated 1561, the wood inlaid with ivory carved in low relief with a bear hunting scene. Bayerisches National Museum, Munich

had himself to adapt the available designs to the shapes of a gun as well as he could. It is for this reason that the inlaid decoration on some firearms seems to be unsophisticated and incoherent. The earliest pattern book specifically for gunmakers is French and, though anonymous, shows the influence of the Paris architect and designer, Androuet du Cereau. It dates from the second half of the 16th Century.

No complete comprehensive designs for 16th Century firearms are known to exist, but there is in the Victoria and Albert Museum a 16th Century set of pen, ink, and wash drawings showing designs for gunstock ornament. The shapes can easily be identified. There are designs for the plaques set in front of the trigger-guard finial, the two plaques on either side of the barrel tang, and also others for the ends of pistols with fish-tail butts. The drawings are probably by the Nuremberg master, Jost Amman, though they now bear the spurious monogram of Virgil Solis, who died before they could have been made. An interesting point about these drawings is the fact that they are colored, indicating that the staghorn upon which they were engraved was intended to be stained. The color range was restricted – one finds traces of red and green on extinct weapons; the other colors, if they existed, have faded out.

Gun ornament followed the normal course of fashion in the decorative arts, with, however, a considerable time lag, though this lag is much more noticeable in firearms produced in provincial

Figure 4. *Wood-carving: Butt of a Saxon wheel lock pistol inlaid with engraved horn and carved with the head of a bird. Early 17th century. Historisches Museum, Dresden*

Figure 5. Goldsmiths' work: Terminal of silver stock of a wheel lock pistol of the Archduke Ferdinand of Tirol; Saxon, about 1555. Kunsthistorisches Museum, Vienna

centres, where traditional folk art themes were influential, than in the capital cities. In the latter, the rapid circulation of pattern books made for a certain universality of fashion. Whereas during the 16th and early 17th Century decoration was usually derived from German sources, in the 17th Century, French designs dominated.

There was another reason for the time lag between the application of new fashions in firearms and other branches of the decorative arts. This was because the gunmakers relied for their ideas on pattern books which had been published long before and remained in use for half a century or more. The pattern books were usually the work of the artists who decorated firearms. When they had completed the decoration of a fine piece, they kept drawings or rubbings of the ornament and when they had collected enough engraved items on copper plates, they published them as a pattern book of new fashions. The book of designs by Philippe Cordier Danbigny, first issued in 1635, was actually reissued thirty years later with the date altered to 1665, though the designs in it were by then seriously out of date.

There is a distinct contrast between firearms decoration of the 16th and 17th centuries, respectively. In the earlier period no particular effort was made to exploit the natural figure or color of the wood. The aim was to cover the stock with a fine web or tracery of engraved staghorn, leaving a minimum of wood to be seen. The stocks decorated by the Thuringian gunstocker Klaus Hirth of Wasungen are covered with fine spirals of staghorn so that little of the wood is visible. Only when a stock was made of some rare exotic wood, such as ebony, palisander, or Brazil wood, was much of the surface left undecorated. As a rule such stocks were not of solid wood but were veneered. In the case of ebony, the reason for this was the difficulty of obtaining large pieces of a consistently black tone, ebony tends to have streaks of lighter color. It was the French and Italians who first learned to exploit the natural qualities of the walnut they used. The French used walnut from the Grenoble region. This had a beautiful figure and was fairly light, golden red in color. Italian walnut was much darker with blackish streaks. In the course of the 17th Century, the French fashion gradually displaced the German as the international style and, by the end of the century, the German gunmakers had not only abandoned inlaid staghorn in favor of stocks in which the figure of the wood played an important role, but also adopted the French shoulder stock instead of the traditional German cheek-stock. They even signed their names in French.

When the wood stock was left plain or inlaid with silver wire that did not obscure its figure, attention was transferred to the mounts, which were now more elaborately decorated. Silver or gilt bronze furniture already accompanies the plain pearwood stocks of some of the Louis XIII guns, but the finest is that of the Brescian firearms of the 17th century (see figures 6 and 7). This took the form of panels of iron floral tracery set in the stocks accompanied by mounts sculptured in high relief, while the parts of the locks such as the cock or arm of the

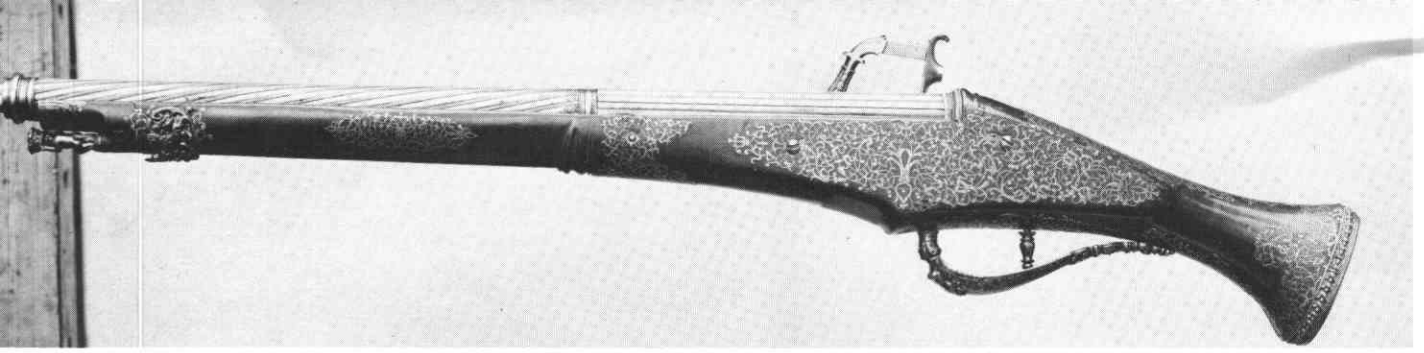


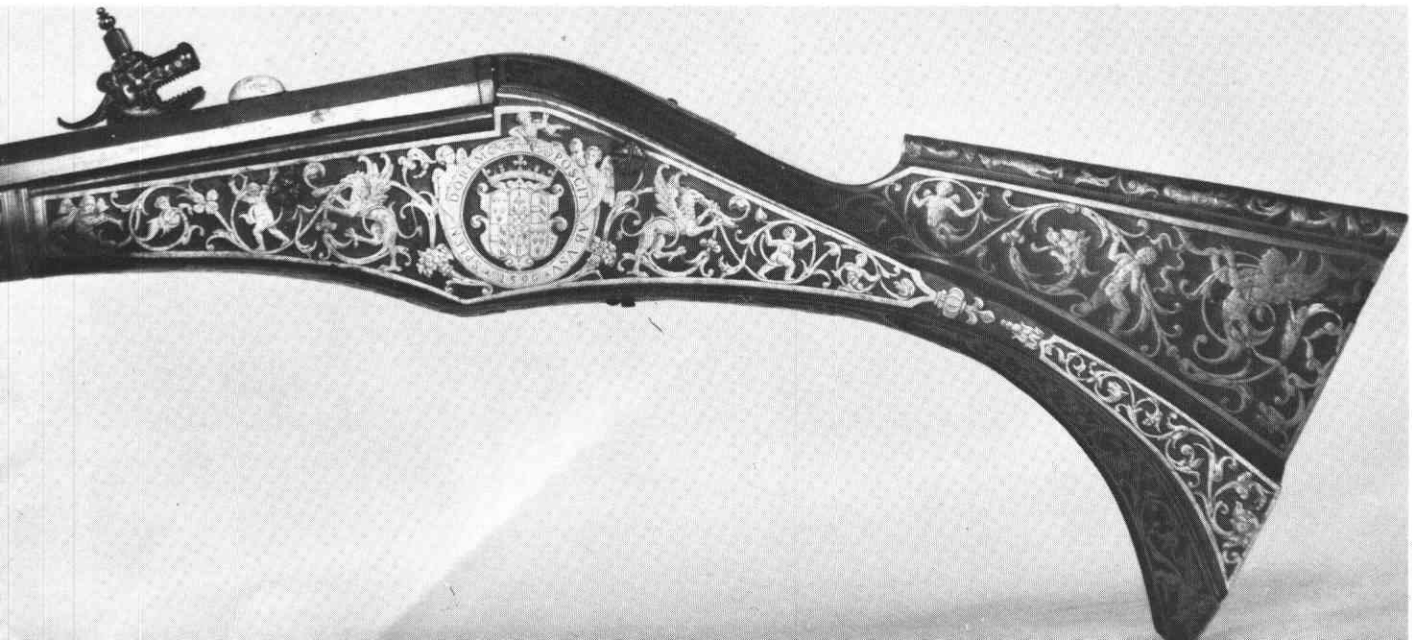
Figure 6. Iron inlay: One of a pair of wheel lock pistols originally made for Louis XIII of France, showing the finest Brescian lace-work inlay. This inlay was always set into the stock, whereas in later imitations the whole area of the stock around the inlay was cut away and the interstices between the lace work filled with wax or mastic. About 1630/40. Kungl. Livrustkammar, Stockholm

steel wrought in the round. The Italian makers realized that nothing was more effective than bright steel panels set into the dark Italian walnut. Color is a decorative feature of the firearm which is often forgotten now. The reason is that color is the least permanent form of ornament. The brilliant blue, which was left by the process of heating iron, has rarely survived the rust oxidation which is the inevitable result of neglect. The gold and silver damascene applied to the surface was microscopically thin and was easily loosened by rust or worn by frequent cleaning or handling. A 16th century firearm might glow with many different colors. The iron parts, silver and gold against a deep fire-blue ground, the mounts with the deeper gold of gilt bronze, the stock with the brilliant white of stag-horn, stained in part green, red or yellow, and with the sheen of mother-of-pearl, set against the dark red of palisander or the pitch-black of ebony.

Patterns used in firearms decoration were mostly derived from the contemporary vocabulary of renaissance ornament. Based on floral or architectural designs they can be traced back to ancient roman sources. An important exception is the mauresque panels composed of abstract interlacing strapwork which were borrowed from the eastern Mediterranean. Usually in combination with classical themes, these mauresques were an almost universal feature of the decoration of the finest firearms, either in the form of wood inlay, engraved or etched on the metal parts.

Little is known of the masters who decorated firearms. As a rule the finest firearms of the 16th and 17th centuries bear no signature. Sometimes the monogram of one or more masters who decorated the piece may be found in more or less obscure places. The initials of the stocker of a German wheel lock may often be found on a small plaque set below the end of the barrel tang. The initials of the engraver who decorated the stag-horn or mother-of-pearl inlays may be found concealed in the engraving in the end of the butt or in the patch-box cover. Steel chisellers did not often sign their work, but there is a wheel lock rifle in Munich with the initials C.S. of Caspar Spat cut into the upper flat of the barrel behind the back-sight. The stamps on barrel or lock are those of the barrel and/or locksmiths, not of decorators. On German wheel lock guns of the second half of the 17th century we may find engraved initials as well as the stamp or signature of the gunmaker on the lock plate. These initials belong to the master who engraved or chiselled the lock.

Figure 7. Iron inlay in wood stock: Butt of wheel lock musket of Duke Rainuccio Farnese, inlaid with iron sheet cut to shape and engraved with figures and monsters, arms of Farnese. Dated 1596. Museo di Capodimonte, Naples



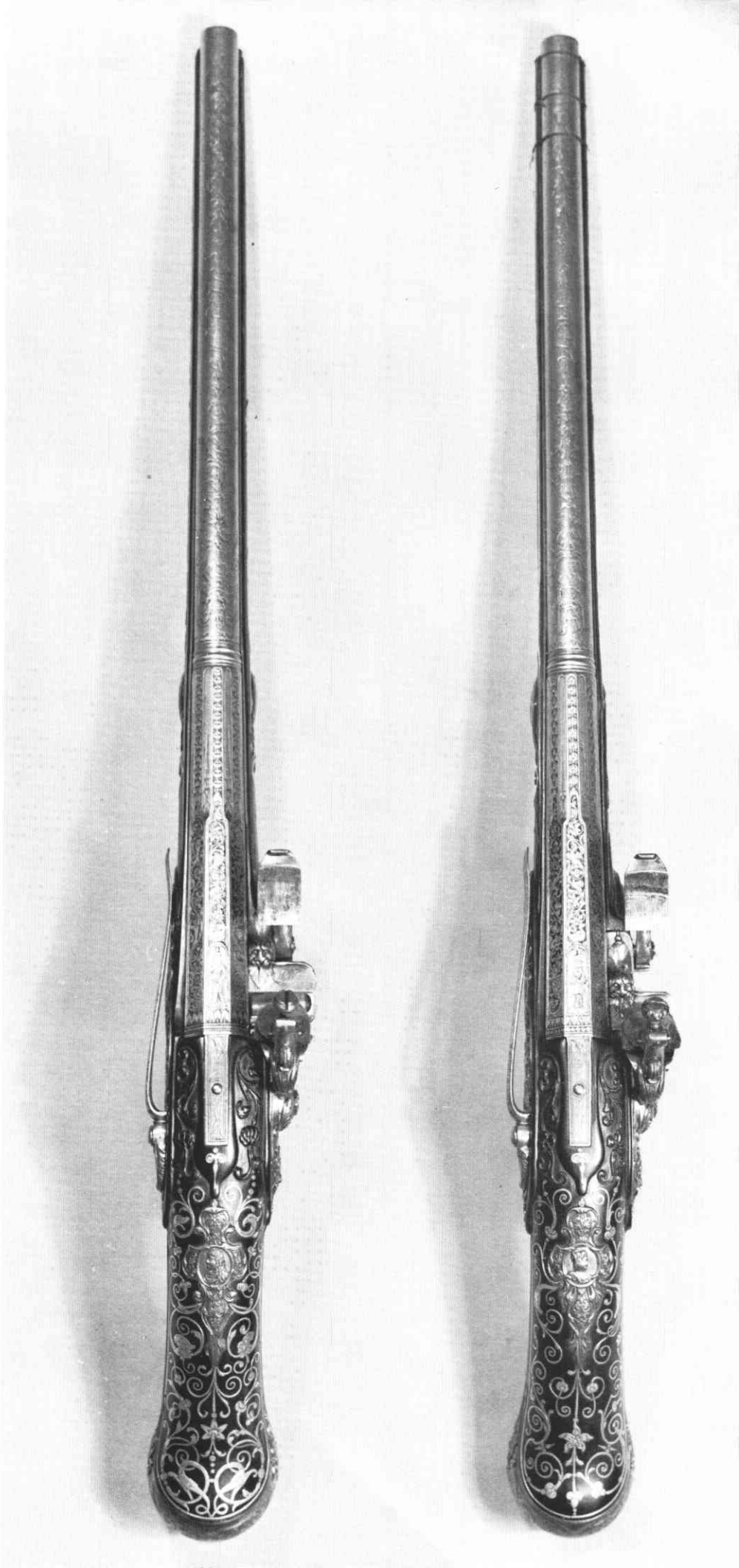


Figure 8. Silver inlay: Butt of one of a pair of flint-lock pistols by Acquafresca of Bargi near Bologna, inlaid with scrolling silver wire. End of 17th century. Private Collection, England

Figure 9. Steel chiselling: Detail of barrel of fowling piece by Bongarde of Dusseldorf, gunmaker to the Elector Palatine. Early 18th century. Private Collection

In the case of French firearms we know that Louis XIII's favorite gunmakers, the Le Bourgeois family of Lisieux, both made and decorated firearms and the signature of Marin le Bourgeois appears in an individual technique of gilding which seems to relate to the decoration rather than the manufacture of the gun. In the second half of the century we usually find only the gunmaker's signature, but there is the well known exception of the double-barreled gun given by Louis XIV to King Charles X of Sweden, the silver inlay in the stock of which is signed by Jean Berain.

English firearms of the 16th and early 17th centuries may bear the stockmaker's initials behind the barrel tang. Otherwise the only name likely to be found is that of the gunmaker who finished and sold the weapon. Towards the end of the 17th century the London Goldsmith's Company extended their jurisdiction to small work, and as a result the silver mounts of firearms made in the London area bear both hall-mark and maker's mark. The earlier Italian firearms are not signed, but during the second half of the 17th century it is not unusual to find the steel chiseller's or engraver's signature on the mounts as well as those of the barrel smith and the gunmaker who finished the piece.

The general trend in the field of decorative art in the 17th century was to increase the scale and importance of ornament; in place of the delicate low relief or flat arabesques of the Renaissance, bold acanthus scrolls rendered in high relief were introduced. The long slender figures of mannerist fashion gave way to lusty Flemish beauties in the manner of Rubens or Jordaens. This trend was faithfully reflected in firearms ornament. The contrast is most strongly expressed in Brescian steelwork. The delicate lacework of the first half of the century was replaced by the sculptural chiselling of the second half in which the mounts were carved in the form of minstars or human figures. Similar changes can be found in French and English firearms: the long and elegant pistol butts of the mid century gave way to the curved forms of the Louis XIV period, the plain and thin mounts of the earlier period to the massive silver furniture of the last quarter of the century. Even the flat lock plate was replaced by a rounded surface which could be chiselled with relief ornament. There is, I believe, no artifact that requires the cooperation of a larger number of craftsmen using different techniques than a fine firearm. It may seem strange that so much decoration was lavished on an object so basically functional as a firearm – all the more so when that decoration in no way increased and might well prejudice the efficiency of the weapon. These fine firearms were intended to reflect the wealth, the aesthetic taste and the glory of the sovereign to whom they belonged or by whom they were presented. The splendor of these early firearms well illustrates the admirable endeavor of man to produce beautiful objects without much regard to such considerations as cost or function.

Figure 10. Silver furniture and gold encrusted barrel: Flintlock holster pistol by La Roche of Paris made for Louis XVI as Dauphin of France, the mounts of cast and chased silver, the stock inlaid with silver wire, the barrel heavily encrusted with gold against a fire-blue ground. About 1740. Wallace Collection, London